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Cambodia

Agricultural Situation

Constraints and Opportunities for U.S. Agricultural Products

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Report Highlights:

Cambodia, located between Thailand, Laos, and Vietnam in Southeast Asia, is starting to develop after many years of economic and political turmoil. Tourism is booming, mostly centered around the town of Siem Reap, the location of the Angkor Wat temple complex. Many opportunities are available for U.S. agricultural products in this small but dynamic market.

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SECTION I. EXECUTIVE SUMMARY

Cambodia's 13 million people have an average annual per capita income of only \$266 and over 30% of the population lives in absolute poverty. Malnutrition is widespread, particularly among children and women. Despite these and many other problems, Cambodia's economy and society has advanced in recent years. With a fast-growing tourism industry, a small but growing urban consumer base, and more than 50% of the country's population under 19 years old, new market opportunities are continuing to emerge.

Cambodia ran a trade deficit of about \$150 million in 2001, a marked improvement over the \$294 million deficit in 2000. Imports in 2001 totaled \$1.422 billion, while exports totaled \$1.268 billion. Garments dominate Cambodia's exports, accounting for over \$1.12 billion in 2001, or 88.3% of total exports. More than 70% of Cambodian garment exports go to the United States. The industry's 200 factories now employ approximately 188,000 workers, nearly 90% of whom are young women, and pays wages of about \$13 million per month. Other important exports include timber and wood products, latex and rubber, and fishery products. Cambodia and Thailand are also cooperating to establish three foreign trade and economic processing zones on the Thai border. These are projected to create 100,000 jobs in the garment, fisheries, and agricultural sectors. More than \$60 million in annual wages is expected, which will directly or indirectly feed at least 500,000 people, about 5% of the country's population.

The Cambodian government is working hard to reform its system and integrate trade as a key element of its national development, poverty reduction, and technical assistance policies. Some of these changes have yet to yield lasting benefit. Foreign direct investment dropped substantially with the political instability of 1997 and was only \$104 million in 2000, the lowest since statistics began 1994. Poor infrastructure, inappropriate allocation of garment quotas, "predation" on projects by government officials, the regional financial crisis, and other reasons caused the decline.

Cambodia's crop, livestock, and fisheries production ranks fourth or fifth in total output compared to its ASEAN neighbors. Only in cassava and ducks does Cambodia hold a third rank position. The country's agricultural sector employs more than 75% of Cambodia's labor force, yet agriculture's share of GDP decreased to just 32% in 2000. This trend is a stronger indication of the rising garment and tourist industries than it is of a decline in the agricultural sector, however.

Although well endowed with large tracts of arable land, ample rainfall, and close proximity to major markets, Cambodia has failed to realize its agricultural potential. This is reflected by the fact that much of the domestic demand for vegetables is currently met by imports, mainly from Vietnam and Thailand. The high volume of smuggled, unprocessed agricultural products is also an indication of the country's agricultural processing potential. The major factors limiting agricultural production include unclear land ownership, poor irrigation infrastructure, inadequate transportation, inefficient marketing, poor farming practices, and inadequate public sector support services.

The country's food supply is still very much based on rice. Total rice output, at over 4 million tons in 2001, was more than 20 times the output of vegetables, the second most important food source, and more than 30 times greater than the 121,000 mt of marine and fresh water fish caught in 2000. Sugar cane, maize, cassava, soybeans and other oilseeds, and sweet potatoes are also important cash or food crops.

The livestock system is still undeveloped and geared to local commercial markets and subsistence, but there are signals that this sector is starting to develop in certain areas.

Increased poultry and swine production around Phnom Penh is mainly due to CP Feedmill Cambodia, a Thai investment. This mill's annual production is projected to expand to 40,000 mt in 2003. The operation aims to develop and integrate the local feed ingredient and livestock industry by offering hybrid corn seed, livestock breeding stock, animal health supplies, and other production inputs direct to producers, or via local dealers. A few small millers existed before CP's arrival, but these firms were unable to compete and have now shut down. Animal feed from Thailand, estimated at about 400 mt per month, is being smuggled into Cambodia and competes with CP's local production. Domestic corn, as well as soybean meal and fish meal (both imported via Vietnam) are important feed ingredients.

Fisheries are an important primary food resource for Cambodia, providing about 70% of animal protein intake. Inland fisheries and aquaculture accounted for over 100,000 mt of total fisheries production in 2000. Marine fisheries are a lesser but still important resource. The processed fish and seafood sector is still very much under-exploited, but is likely to grow as free trade zones come on line in 2004 and reforms take place in the government marketing system.

Cambodia's forests are some of the country's most abundant resources. However, over the past 10-15 years, these resources have been exploited heavily, usually with little or no control. The government has recently enacted legislation to better manage and control this sector.

The agricultural and food processing sector is exceptionally weak and lacking investment, so most food commodities are sold raw and unprocessed. Much of the farm produce is either consumed locally or is smuggled across the borders to Thailand or Vietnam where more value is added. The main domestically processed products include milled rice; smoked, dried, fermented, or salted fish; and fermented and semi-processed vegetables and fruits. Large processing firms including the CP animal feed plant, two flourmills, two breweries, and beverage bottlers.

Wheat imports for flour milling are estimated to total at least 35,000 mt annually. The market for flour is reportedly growing about 10% per year, mainly due to increased demand for baked goods from tourists and a shift to more bread and bakery products consumption in urban areas.

The distribution system is surprisingly complex due to the wide range of domestic and imported products traded, the many market channels, and the fact that so many products are traded illegally. Traditional wet and dry markets still play a dominant role in the domestic distribution system. It is estimated that at least 80 to 90% of the food products traded in the country are moving through this system.

The supermarket, grocery, and convenience store trade is quickly being developed in Phnom Penh and other major cities to provide a wide range of mainly imported products to middle and higher income urban consumers. This segment of the market includes mainly expatriates and medium/upper class Cambodian consumers, estimated to number well under 500,000 people nationwide. In Phnom Penh alone, there are more than 25 grocery stores. Retailers arrange their own imports and also source from importer/distributors. Even though many U.S. products are carried, most imports are from Thailand or Vietnam because they are cheaper and often more suited to local consumer preferences. Cambodia's tourism industry is booming. Inbound tourists arrivals are projected to increase to 600,000 in 2003. This is creating a prime, fast-growing market for many imported food products used by hotels and restaurants. However, some sources estimate that about 75% of each tourist dollar is currently returned to Thailand or Vietnam to import fresh vegetables, fruit, meat, processed foods, flowers, and other products required by hotels and restaurants serving the tourist

trade. About five or six importers-distributors supply this market, either on a direct sale or consignment basis. Some imported products, particularly U.S. brands, also are imported via sea freight from Singapore and Malaysia. There are good opportunities for U.S. food and agricultural products to capture a greater share of this market.

There is still a significant need for food aid in Cambodia. The UN World Food Program (WFP) is the largest organization involved and is the largest recipient and distributor of U.S. food aid in the country. In 2001, WFP dispersed 51,600 mt of commodities (mainly rice, corn-soy blend (CSB), sugar, and vegetable oils) worth approximately \$27 million to over 1.7 million people. Of this amount, about 13,000 mt was rice that was procured locally. The U.S. supplied nearly 47% of WFP's products in 2001. At least another 55 NGO's and other organizations are operating throughout the country on various small-scale food and nutrition support programs.

USDA has also provided another \$6.4 million in food aid commodities to Salesian Missions and HOPE Worldwide for use in Cambodia over the next three years under the Food for Progress and Section 416(b) programs. Both projects involved monetization of the commodities, either locally or in Thailand.

The Cambodian government's priorities for agriculture and the rural sector include:

- Improving food security
- Adding value to crop and livestock production
- Increasing income opportunities for rural households
- Strengthening participatory processes
- Ensuring sustainable production, and
- Increasing the availability of rural financial services

These priorities highlight the biggest challenge facing Cambodian agriculture, which is to shift from a rice-based economy to one that is more diversified and producing higher value products. Although agriculture and rural development is critical to so many Cambodians, more specific policies on agriculture are not well defined, mainly because the Ministry of Agriculture is a relatively weak and under funded agency. Recent ADB funding of \$35 million is intended to improve this situation.

Cambodia's agricultural tariffs are relatively low. Tariffs now range from 0 to 35%, as follows:

Luxury goods and finished products:	35%
Machinery and equipment:	15%
Raw materials:	7%

U.S.-Cambodia bilateral agricultural trade is very much in favor of the U.S.. In 2001, the U.S. sold more than five times as many agricultural products to Cambodia than were shipped to the U.S.. U.S. agricultural exports in 2001 to Cambodia totaled over \$9 million. Rice and vegetable oils dominate this trade, but are mainly for food aid uses. In the commercial market, cotton, tobacco, and other intermediate products are popular. Sugars, sweeteners, and beverage bases, snack food, red meats, poultry, dairy products, and wine and beer are the main consumer products imported. U.S. cotton, milling wheat, soybean meal and other feed ingredients, swine breeding stock, and brewing industry ingredients also have potential in this market.

SECTION II. SOCIO-ECONOMIC SITUATION

2.1 Political Background

Cambodia was once one of Southeast Asia's most stable and prosperous countries, but its social, economic, and political institutions were essentially destroyed by the Khmer Rouge regime from 1975-79 and Vietnamese communist central planning that followed. The Cambodian government officially adopted market economics in 1989, but it was not until after the re-establishment of the constitutional monarchy in 1993 that the economy finally began to grow again. Today, Cambodia is one of the world's poorest developing countries, but with a relatively fast growing market economy.

2.2 Demographic and Social Overview

More than 85% of Cambodians live in rural areas and more than 50% of the population is under 19 years old. The labor pool numbers over 6 million people and is growing 3.4% annually. The reported unemployment level is over 7%, but real figures are unknown. Due to this large supply of labor, increasingly mechanized farming, and poorly developed rural industry, there are few rural job opportunities for the 200,000 young people who enter the labor force each year. Thus, urban migration is becoming a major factor in Cambodia's few large cities.

The daily wage in the garment and footwear industries is currently around \$2.00 per day, or about \$45 per month. There is no minimum wage for any other industry, and daily wages for field workers and laborers is typically \$1.00 per day. As a result of the widespread social destruction and emigration during the Khmer Rouge period, overall literacy today is 68% and adult literacy is only about 35%. There are few well-educated or skilled workers available, and training and education are in high demand.

These and other economic and demographic factors have made Cambodia's health and nutrition situation one of the most critical in Asia. Malnutrition is widespread, particularly among children and women. International relief agencies estimate that 45% of Cambodian children are chronically malnourished, 59% suffer from stunting, and 58% are anemic. In addition, infection with human immunodeficiency virus (HIV), tuberculosis (TB), and malaria are serious health problems throughout the population.

2.3 Economic Overview

More than 30 years of conflict have left the government budget heavily skewed toward defense and security expenditures, which together accounted for 42.7% of official government spending in 1999. Freeing budget resources to address poverty reduction is the overriding goal of the government's reform program, and the government has committed to significantly increase spending on the priority social sectors of health, education, agriculture, and rural development. However, actual budget disbursements in these sectors lag significantly, especially at the provincial level. The government has also failed to achieve its objective of allocating 65% of its budget to rural areas. The 2002 budget increases social spending and reduces the security budget; with defense and security spending dropping to 2.72% of GDP and social spending reaching 4.07%.

Cambodia's currency has been relatively stable since 1993, with the exception of a sharp depreciation in 1997-98. The annual average exchange rate for 2000 was 3,880 riels/US\$1. In 2001, the riel depreciated approximately one%. The rate during 2002 has continued to depreciate and is currently close to 4,000 riel/US\$1. Maintaining a stable exchange rate is a

priority of Cambodia's current IMF program. The economy is heavily dollarized, with the U.S. dollar accounting for an estimated 70% of the nation's total liquidity, equivalent to 15% of GDP in 2000. As of November 2001, foreign currency deposits represented some 95% of the total deposits in Cambodia's commercial banks (excluding provincial branches of the central bank) and remain the main engine behind broad money growth.

Cambodia's government revenues in recent years have totaled only about 12% of GDP, which is low even by developing country standards. This severely limits public spending and investment and requires the government to rely on foreign assistance for every aspect of national reconstruction. Currently, this assistance totals over \$600 million per year.

2.4 International Trade and Policy

2.4.1 International Trade

According to official figures, Cambodia ran a trade deficit of about \$150 million in 2001, a marked improvement over the \$294 million deficit in 2000. Imports in 2001 totaled \$1.422 billion, while exports totaled \$1.268 billion. Major imports include petroleum products, cement and other construction materials, vehicles, tobacco, and a broad range of consumer products. Actual trade figures are unknown, mainly due to the high levels of smuggling and unofficial trade along the country's long and porous borders.

Garments dominate Cambodia's exports, accounting for over \$1.12 billion in 2001, or 88.3%, of total exports. More than 70% of Cambodian garment exports go to the United States. The garment industry has been Cambodia's greatest success, growing from seven factories exporting \$4 million in 1994 to over 200 factories in 2002. The industry now employs approximately 188,000 workers, nearly 90% of whom are young women, and pays wages of about \$13 million per month. However, the garment industry is threatened to lose its quotas in the U.S. market unless Cambodia joins the WTO before December 2004.

Other important exports include timber and wood products, latex and rubber, and fishery products.

Cambodia and Thailand are cooperating to establish three foreign trade and economic processing zones on the Thai border. These are projected to create 100,000 jobs in the garment, fisheries, and agricultural sectors. More than \$60 million in annual wages is expected, which will directly or indirectly feed at least 500,000 people, about 5% of the country's population. Of highest priority is the site at Koh Kong in the south, which is being established with over \$60 million in private investment and should be operational in 2004. The second zone is at Poipet in the northwest, which is expected to cost \$92 million to accommodate 280 factories. The third zone is near Pailin and is expected to require an \$80 million investment. A previous effort to establish a trade zone at the Port of Sihanoukville was not successful because of the site's poor infrastructure and high-energy costs.

2.4.2 Trade Policy

The Cambodian government is working to integrate trade as a key element of its national development and initiate "Pro-Poor" poverty reduction and technical assistance policies. The Ministry of Commerce is spearheading this "Integrated Framework", with support from the World Bank, IMF, ITC, UNCTAD, UNDP, and WTO through various forms of technical assistance. This approach is also intended to develop WTO-consistent legislation and to ensure that further government reforms are in line with WTO regulations. The following

statement by Mr. Sok Siphana, Secretary of State for Commerce, best describes the government's new approach to trade and development policy.

"We want trade to be a substitute for aid. In the past, Cambodia got sandwiched between Thailand and Vietnam. Now, with free trade, we could be the meat in the sandwich."

Mr. Sok Siphana, Secretary of State for Commerce

In this regard, it is notable that Cambodia is one of only three countries worldwide that was selected by international donors to implement this approach to trade and development. This policy approach is supporting Cambodia's chances of joining the WTO before the end of 2003. This would make Cambodia the first least-developed country to join the WTO since it was formed in 1995.

Most of the new policy efforts through the Integrated Framework are concentrated on six key sectors of the economy: agriculture and agro-processing, garments, fisheries, tourism, handicrafts, and labor services.

Cambodia is a member of the Association of Southeast Asian Nations (ASEAN) and the ASEAN Free Trade Area (AFTA), but it has not yet completed its program to reduce tariffs as required by AFTA. Cambodia views its membership and development within ASEAN as a stepping-stone to freer trade, and particularly its accession to the WTO. The country should also gain from ASEAN's deepening economic cooperation with its dialogue partners, particularly Japan and China.

2.4.3 Tariffs

Compared with many countries, Cambodia's trade regime is relatively open. The government eliminated all quantitative restrictions on trade in 1994. In April 2001, tariffs were greatly simplified, with the number of different rates falling from 12 to 4, and the top rate reduced from 120% to 35%. At the same time, excise taxes were raised on certain products. This allowed government revenues to be maintained without providing high protection to favored products. The widespread use of the U.S. dollar for both domestic and international transactions also helps to facilitate trade. This open trade regime has allowed the economy to respond positively. Recent growth rates of 5% or more are good compared to previous years.

Recent tariff reform has not, however, been enough to stimulate widespread growth and reduce the high level of poverty. This is partially because the current tariffs continue to offer effective protection for some products and industries, with the highest rates applying to processed goods and lowest rates to raw materials. As a result, local producers who rely on some processed or semi-processed goods must pay relatively higher tariffs on imports. This effectively limits their ability to be competitive in both the domestic and international markets. Investment laws allow exporters exemptions when they import goods for re-export. However, this system is reported to be unwieldy and involves high official and unofficial costs. Export taxes also apply to several classes of goods, including live animals, fish, and raw hides and skins. One intention of these taxes is to encourage domestic processing, value-addition, and employment. However, in practice this structure is helping vested interests, encouraging unofficial trade, reducing returns to producers and domestic traders, and generally limiting the development of these industries.

Reforms to many of these tariffs will likely come as Cambodia steps closer to WTO membership, and particularly as it becomes more integrated into AFTA. When Cambodia became a member of ASEAN in April 1999, it committed to a gradual reduction in most tariff rates to 0-5% by 2010 for trade with other ASEAN members. Along with Laos, Myanmar, and

Vietnam, Cambodia committed to completely eliminate tariffs for nearly all products by 2015. The other six ASEAN members will eliminate their tariffs by 2010. Currently the decision making process with respect to AFTA mainly hinges on the timing at which different classes of goods will hit the 0-5% target.

2.4.4 Customs

Customs administration is reported to have improved in recent years, but further training and reforms are badly needed. Setting up a low cost formal trade facilitation system is difficult, especially given Cambodia's long and porous borders with three neighbors. New international trade arrangements, such as rules of origin requirements and preferential trading arrangements in ASEAN, make the task even more difficult. Limited resources also constrain the customs department in carrying out its duties. Civil service salaries are low, physical support facilities are inadequate, and management information systems are poor. Thus, there are high levels of bribery and smuggling, port clearance and processing times are erratic, and tariff collection is significantly reduced.

2.5 U.S.-Cambodia Trade

Cambodia and the U.S. have full and expanding trade relations. The U.S. lifted the embargo on trade with Cambodia on January 2, 1992 and Normal Trade Relations (NTR) was established in 1996. The country is also designated as a Least Developed Beneficiary Developing Country under the U.S. Generalized System of Preferences (GSP) program.

Cambodia and the U.S. signed a three-year bilateral textile agreement in 1999 that provides export quotas for 12 categories of textile and apparel products. The agreement allows quota increases based on Cambodian labor conditions meeting international standards. The agreement was recently extended for a further three years.

U.S. exports to Cambodia are likely to remain modest for the near term. The U.S. exported approximately \$37.5 million worth of goods to Cambodia in 1999, including used vehicles and spare parts, cigarettes, and used clothing.

2.6 Government Reforms

In recent years, the Cambodian government has undertaken a comprehensive program of economic reforms in addition to the reductions in tariffs noted above. Key areas include fiscal reform, banking sector restructuring, civil service reform and improved governance. These efforts are highly detailed and watched closely by international donors. Good governance has been a major theme of the process. Issues such as civil service, judicial and legal reform, improving the quality of public services, and reducing corruption are part of the process. There are also calls for better forest management, military demobilization, and revenue collection. Results have been mixed. Improvements in governance are slow, but progress has been made in improving control of the forestry sector.

Cambodia is also still in the process of developing a regulatory framework that will assure the health and safety of individuals and companies operating in a new free market economy. In 2000, the government passed a law on quality of goods and services, comprising food safety, consumer protection, and product liability. A new Land Law was passed in 2001 and a new Forestry Law is under review. A Trademark Law recently was enacted and a Business Organization Law and Copyright Law is expected by the end of 2002.

Corruption, particularly within the judiciary, has been marked as the single biggest deterrent to investment in Cambodia. Public sector salaries range from \$15-30 per month for lower level officials, and less than \$300 per month for high-ranking officials. As a result, corruption

is widespread and public officials make no effort to disguise their wealth. Cambodian laws and regulations are not sufficient to address the problem and are seldom enforced. The government indicated its intent to pass new anti-corruption legislation by late 2001, but had made no progress by early 2002.

2.7 Investment

A key objective of government reforms is to improve Cambodia's attractiveness for foreign direct investment (FDI) and thus enhance economic growth. Even though current investment laws provide for an open and liberal foreign investment regime, FDI dropped substantially with the political instability of 1997 and has yet to recover. Actual investment was only \$104 million in 2000, which is the lowest since the government began compiling statistics in 1994. Sources cite poor infrastructure, inappropriate allocation of garment quotas, "predation" on projects by government officials, and the regional financial crisis as reasons for the decline. To make matters worse, international financial institutions have recommended cuts in the current investment incentives.

Tourism accounted for 39% of total investment in currently active projects, followed by industry and garments, which totaled 38% from 1995 to 2001. Agricultural, food processing, and wood processing investments accounted for only about 11% of all investments. The reliability of these figures, however, is uncertain because government statistics account for some projects that have not been started, or never fully implemented as planned.

There are reportedly over 100 U.S. firms representing U.S. products and services that are operating in Cambodia, many of them in the garment industry. However, American investment in the country has been modest. From 1995 through the first quarter of 2001, U.S. investment was reported at only about \$37 million, just one% of total investment for the period. Malaysia, Cambodia, and Taiwan accounted for 42%, 22%, and 8% of the total, respectively. Major non-U.S. foreign investors include Asia Pacific Breweries (Singapore), Raffles International (Singapore), Thakral Cambodia Industries (Singapore), Petronas Cambodia (Malaysia), Charoen Pokphand (Thailand), and YTL (Malaysia).

Trade sources say that investment in 2002 has increased to some extent, even though the amount of official investment pledged has declined. A more stable political and economic situation is a key reason for this reported expansion. However, there is still widespread frustration with corruption and government predation on projects.

2.8 Infrastructure

Cambodia's infrastructure was almost completely destroyed during more than 20 years of warfare, civil strife, and neglect, but it is slowly being restored. Electrical power supply systems are gradually being built, particularly to serve major cities. Annual electricity demand is projected to increase more than five fold over the next 15 years. To meet rising demand, the government plans to develop \$1 billion worth of hydro, gas, and thermal generating plants in Phnom Penh, Sihanoukville, Battambang, and other cities from 2000 to 2010, along with a nation-wide transmission system. How this will be financed is still an open question. Prices for power remain three to four times higher in rural areas than in Phnom Penh, even though Phnom Penh rates, at \$.21 a kilowatt-hour, are high compared to other Asian cities.

There is a huge need to repair the nation's highway system. The government provides few funds for this, and is relying on foreign assistance projects and multilateral loans for most of

the effort. Transport costs are extremely high and are a significant barrier to increased trade, both domestically and internationally.

The Royal Railway of Cambodia is a state-run company. The system has two lines, one linking Phnom Penh with the port of Sihanoukville, the other connecting Phnom Penh, Pursat, Battambang, and Sisophon. The narrow-gauge track, engines, and rolling stock are all in poor condition and the government is seeking aid to rebuild the system.

The river port of Phnom Penh has been upgraded, and Japan has provided assistance to improve the cargo terminal at the deepwater port of Sihanoukville. The upgrade will include a new pier designed for oil tankers of up to 30,000 tons. Negotiations between the Cambodian and Vietnamese governments to facilitate use of the Mekong River as a shipping route to Phnom Penh, as was the case pre-1960, are underway. Shipping charges in Cambodia are the highest in the region and four times the cost for shipments of comparable size in Thailand.

Reliable fixed line and mobile telephone services are available in Phnom Penh and most provincial cities, but are expensive compared to other countries in the region. The Ministry of Posts and Telecommunications (MPTC) provide fixed line service. Four systems compete for mobile service. MPTC also controls Internet service in Cambodia.

2.9 Outlook

Cambodia's economy is growing and the government is working with international donors to develop the economic, legal, and government institutions to support an investment-friendly, open market economy. This transformation should continue as long as political stability is maintained and the government remains willing to implement reforms. In spite of these positive steps, Cambodia will continue to face huge challenges in providing basic products and social services to its people.

SECTION III. FOOD & AGRICULTURAL OVERVIEW

3.1 Regional Perspective

Table 3 compares Cambodia's crop, livestock, and fisheries production with its Indochina neighbors. For most of these products, the country ranks fourth or fifth in total output. Only in cassava and ducks does Cambodia hold a third rank position.

Table 3. Agricultural and Fisheries Production in Indochina

	Cambodia	Laos	Thailand	Myanmar	Vietnam
Crops					
Cassava (mt)	131,052	71,000	18,283,000	96,818	2,050,300
Corn (mt)	173,718	117,000	4,673,000	350,000	2,117,900
Rice, Paddy (mt)	4,099,016	2,201,700	25,200,000	20,600,000	31,925,400
Sugar Cane (mt)	167,100	296,960	49,070,000	5,893,657	15,089,000
Sweet Potatoes (mt)	25,963	117,500	90,944	57,382	1,610,000
Tobacco Leaves (mt)	7,748	33,400	74,200	48,161	28,800
Vegetables (mt)	470,000	255,200	950,000	2,800,000	4,350,000
Livestock					
Buffalo (head)	625,907	1,008,000	1,900,000	2,500,252	2,950,000
Cattle (head)	2,868,727	1,100,000	6,300,000	11,218,159	4,200,000
Chicken ('000 head)	15,251	14,000	190,000	48,269	150,000
Duck ('000 head)	46,000	17,000	23,000	62,000	57,000
Pig (head)	2,118,273	1,500,000	8,300,000	4,138,912	20,200,000
Fisheries					
Total fish catch*	284,100	60,403	3,607,707	945,827	1,794,910
Total marine fish catch*	28,100	-	2,340,433	695,904	777,000

Note: * = 1999

Source: FAO

3.2 Agricultural Production Situation

Cambodia's agricultural sector, which includes production of rice, livestock, forestry, fisheries, and other crops, employs more than 75% of Cambodia's labor force. According to Cambodian government statistics, agriculture's share of GDP decreased from some 42% in 1996 to 32% in 2000. This trend is a stronger indication of the rising garment and tourist industries than it is of a decline in the agricultural sector.

Cambodia has strong potential to grow as an agricultural supplier. The country is endowed with large tracts of arable land and ample rainfall, and is in close proximity to major ASEAN markets, particularly Thailand and Vietnam. Up to now, however, Cambodia has failed to realize its agricultural potential. This is reflected by the fact that much of the domestic demand for vegetables is currently met by imports, mainly from Vietnam and Thailand. The high volumes of smuggled, unprocessed agricultural raw materials are also a strong indication of the potential for greater agricultural processing within the country.

The major factors limiting agricultural production include unclear land ownership, poor irrigation infrastructure, inadequate transportation, inefficient marketing, poor farming

practices, and inadequate public sector support services. The Cambodian government, international donors, and NGOs are well aware of these limitations, as well as agriculture's growth potential and its important role in reducing rural poverty. As a result, the sector is receiving high priority for support at many levels. At the government level, the Ministry of Agriculture, Forestry, and Fisheries has been designated as one of four priority ministries to receive expanded budgets.

Cambodia's domestic crop production highlights the fact that the country's food supply is still very much based on rice. In fact, total rice output, at over 4 million tons in 2001, was more than 20 times the output of vegetables, the second most important food source, and more than 30 times greater than the 121,000 mt of marine and fresh water fish caught in 2000. Sugar cane, maize, cassava, and sweet potatoes are also important cash or food crops.

3.2.1 Rice

Rice is, by far, Cambodia's most important crop. For centuries, it has been the mainstay of Cambodia's economy. Often supplemented with fish and vegetables, rice is still the staple food source for most of the population. Rice area, yields, and production from 1996-97 through 2000-01 - annual production has averaged 3.62 million tons. It is notable that this is less than 15% of Thailand's total rice output and about half of that country's annual export volume. A similar comparison can be made with Vietnam.

Cambodia's harvested rice area has varied considerably from 1.86 million hectares in 1996-97 to 2.08 million hectares in 1999-2000. With yields generally stable at about 4.7 mt/hectare, it is this variation in harvested area that has most affected output. Much of this variation is due to severe flooding in some years. Economic simulations also indicate that improving two key factors in rice production would have the greatest impact on reducing poverty and cutting transaction costs. These include a) improving paddy-to-milled rice yield and b) cutting post-harvest losses.

Despite problems and inefficiencies in the industry, since 1995, Cambodia has been technically self-sufficient in rice. Its annual output of between 3.5 and 4 million MT of paddy over that period has been adequate to meet local demand and still leave some rice available for export. However, the factors noted above, plus poor distribution facilities and illegal exports, have created pockets of short supply.

Due to the heavy flooding last year, the country had a deficit of about 45,000 mt of rice, all of which was supplied by foreign assistance. UN World Food Program estimates average consumption of rice at 157 kg/capita per year in 2001.

Although rice is an important source of food for most of Cambodia's households, an evolution is taking place in the industry. Rice is gradually changing from a source of food security to a product for trade and income. Producers and processors are increasingly focusing on commercial opportunities, as well as diversifying rice production into other crops and products.

Part of the reason for this is that Cambodia's rice industry is still quite fragmented and the entire production, milling, and marketing system has yet to recover from its destruction during the Khmer Rouge period. At the local level, there is very little official control over the trade. An indication of this is the fact that only in the past two years has a Cambodian Rice Millers Association been formed, and this group is still grappling with group-oriented issues. There are eight provincial rice associations and a national federation. Similar efforts are underway to develop greater organization in the rural electricity and fisheries sectors.

The relative immaturity of Cambodia's rice industry allows much of the crop to be exported unofficially, particularly from certain regions. For this reason, most official trade figures are considered to be inaccurate. The majority of rice exports are reported to be moving to Thailand via Battambang and Poipet. Much of the rice moving into Thailand is then re-exported. The majority of the product moving to Vietnam is said to pass through Vietnam's Tay Ninh province and then consumed domestically. Much of this export trade is of higher value rice, such as fragrant varieties that are in high demand in other Asian markets.

Rice trade, both for domestic and export markets, is mainly constrained by poor transport infrastructure, which reflects road funding policies and checkpoint charges. Export procedures also pose a significant tax on rice trade. "Facilitation fees" must be paid to obtain export licenses and these costs are reported to be as much as \$14/ton. According to some estimates, these and other unofficial costs are nearly double the official costs of exporting.

3.2.2 Vegetables and Sweet Potatoes

In terms of total output, vegetables and sweet potatoes are Cambodia's second and sixth ranked crops. Both are important local food crops for much of the population, but domestic production is inadequate to meet demand.

Vegetables

Annual cultivated area has averaged slightly less than 35,000 hectares from 1995-2001. Total production during the period averaged 186,000 mt, but ranged from only 128,000 mt in 1998 to 250,000 mt in 1996. Area and production have stagnated since 1999, at only about 32,000 hectares and 185,000 mt.

Compared to other crops in Cambodia, vegetables are fairly widely grown and at least some production is recorded in every province. The highest production areas in 2001 were Kampong Cham (38,900 mt), Kandal (26,600 mt), Ta Keo (22,683 mt), Kampong Chhnang (18,000 mt), Kam Pot (18,000 mt), and Siem Reap (14,500 mt). Roughly 60% of vegetable production is during the rainy season and spread across all provinces. Dry season production is mainly concentrated in the largest producing provinces noted above.

The main vegetable crops and their estimated percentage of total production include cucumbers (12%), cabbage (9%), cauliflower (8%), eggplant (7%), yardlong bean (6%), tomato (6%), Chinese cabbage (4%), and mustard (4%).

Despite their widespread cultivation, vegetables produced in Cambodia are still inadequate to meet demand. Trade sources estimate that 25-50% of total vegetable sales are supplied by imports from Vietnam and Thailand. The major imported vegetables include cabbage, Chinese cabbage, cauliflower, beans, potatoes, capsicum, onion, shallots and carrots. Most of these imports occur during the off-season when Cambodian production is limited. Imports are projected to continue to grow along with rising population and tourism.

Several production problems, including poor seed quality, limited pest management, inadequate water resources, high local labor costs, the low technical skills of farmers, and the high costs of fertilizer, pesticides, and seed, are the main causes of this situation.

Studies by UNICEF and other researchers also indicate that vegetables account for only 7 to 8% of farm income in just six key provinces. In other provinces, vegetables provide less than 2% of farm income. On the consumption side, only about 4 to 6% of household income is spent on vegetables in Cambodia, as compared to 9% in Sri Lanka, 11% in China, and over 22% in Taiwan.

In spite of these limitations, there are anecdotal reports of exports of dried chillies to Thailand and processed tamarind and lemon grass to Europe. In addition, small quantities of specialty products are being supplied to the hotel trade, mainly in Siem Reap and Phnom Penh. These ventures are indicators of future opportunities, but more effort must be made at the production level, as well as on post-harvest factors such as phyto-sanitary procedures, pesticide residues, improving processing and distribution infrastructure, and marketing and promotion.

Sweet Potato

Sweet potato output totaled just over 28,000 mt in 2001. Nearly 40% of the production was concentrated in Kampong Cham and Kam Pot provinces. Svay Rieng, Siem Reap, and Kampong Chhnang are also relatively large producing provinces. The rest of the production was distributed across the other 19 provinces. Production is fairly even between the wet and dry seasons, with about 60% produced during the rainy period. However, roughly half of the 11,000 mt produced during the dry season came from Kampong Cham.

Sweet potato is commercially traded in local and provincial markets throughout the country, but virtually all the production is used in homes for food. There are no known processing markets for this crop other than backyard producers.

3.2.3 Sugar Cane

Sugar cane is Cambodia's third largest crop in terms of total tonnage. Production in 2001 was over 164,000 tons from 7,700 hectares in all of the rural provinces of the country. More than 70% of the output is from the rainy season crop. Just three provinces, Kandal, Koh Kong, and Kampong Cham, account for over 56% of total production. Pursat and Siem Reap also produce sizable quantities. The remaining production is spread across the country. Kandal and Kampong Cham provinces account for over two-thirds of the dry season output, primarily due to the better water resources in those provinces.

3.2.4 Corn

Cambodia's corn (maize) area and production has been generally increasing since 1998. Annual cultivated area was steady at about 40-50,000 hectares from 1995-1998. Total production during the period ranged from 42,000 to 65,000 mt. In 1999, area climbed to 60,000 hectares and production jumped to more than 95,000 tons. Area and production continued to climb in 2000, with cultivated area pegged at 57,000 hectares and production at 156,000 tons. This represents an increase of 26% in planted area and a 218% increase in production since 1998. Total maize production reported in 2001 was nearly 185,000 tons.

Most of Cambodia's corn production is feed-grade yellow corn grown in the northwestern provinces, particularly Battambang. About 95% of the total annual production is grown during the rainy season (May-October), but about 5,000 mt is produced during the dry season, mainly in Kandal and Siem Reap provinces.

Much of this corn is used in the Thai feed milling industry, which currently requires about 4 million metric tons of corn annually to meet demand in the livestock sector. Sources report that Thai companies that provide improved seed and production financing to Cambodian dealers essentially control a sizable share of Cambodia's corn production. These dealers, in turn, provide support to the Cambodian corn producers. When supplies of corn in Thailand are drawn down and prices advance (usually during the second and third quarters of the calendar year), the Thai companies then exert influence on border officials to allow the

Cambodian corn to enter Thailand. Most of this trade is unofficial, so it is difficult to obtain accurate information about volume, values, and prices.

3.2.5 Cassava (Tapioca)

Cassava is Cambodia's fifth largest crop in terms of total output. Production in 2001 was reported by the Ministry of Agriculture at 148,000 tons from over 16,000 hectares in 24 provinces. Nearly 90% of total production is from the rainy season crop. Kampong Cham province accounts for over 28% of the total output. Battambang, Kampong Thom, Kam Pot, and Kompong Speu combined to produce another 31% of the 2001 crop. The remaining production is spread in relatively smaller volumes across the country. Siem Reap, Kampong Thom, Pursat, and Take provinces account for over 72% of the dry season output.

There is no sizable cassava processing industry in the country, particularly for native or modified starch, so most of the production is used for various foods domestically. Some sources report that Cambodian starch is sometimes sold to buyers in Thailand for further processing.

3.2.6 Soybeans and Other Oilseeds

Soybeans

Cambodia's soybean production has averaged about 30,000 mt annually since 1995. Planted area has ranged from 17,000 hectares in 1995 to a high of 35,000 hectares in 1999, while production has varied from 17,000 mt in 1995 to 56,000 mt in 1997. Production in 2001-totaled 28,111 mt, of which about 94% was grown in Kampong Cham province. Battambang province in the northwest also produced about 1,500 mt.

Most of the country's soybean production is used domestically for food consumption (sprouts, soybean drinks, and vegetable oil), but an increasing amount is being used by the livestock feed industry, particularly by CP Group in their feed mill near Phnom Penh. At this point, no local crushers of any significance exist in the country, so domestic production of soybean meal and oil is very small.

Sesame

According to the Ministry of Agriculture, sesame production in 2001 reached nearly 10,000 tons. Planted area was over 19,000 hectares. Over 98% of the production was during the rainy season (May-October). Kampong Cham province produced over two-thirds of the output, but other central region provinces are also significant producers of this crop.

Sesame is primarily used in local foods as whole seed, but a small quantity is reportedly extracted for human consumption. No trade figures are available for this crop, but some sources report that Cambodian sesame is sometimes exported unofficially to Thailand and Vietnam.

Castor Oil

Castor seed is a relatively minor oilseed crop in Cambodia, with only 204,000 hectares cultivated in 2001. About 80% of the annual output is produced during the rainy season, with most of the production concentrated in Battambang province in the northwest. Dry season production accounted for only about 20% of total output in 2001. Kandal and Kampong Chhnang provinces accounted for this portion of the crop.

Castor is mainly an industrial oil crop and there are no reports of this oil being used for human consumption in Cambodia. No trade figures are available for this crop either, but sources suggest that the majority of the production is exported unofficially to Thailand where there is a sizable castor oil processing industry.

Peanut

Peanut production in 2001 was only about 7,500 mt from 10,400 hectares. Although this crop can technically be considered an oilseed in most countries, in Cambodia it is primarily traded in local markets and consumed as a food crop in a wide variety of local dishes. Production in 2001 was concentrated in just four main agricultural provinces: Kampong Cham (2,948 mt), Battambang (1,130 mt), Kandal (865 mt), and Prey Veng (432 mt). Nearly three-quarters of the annual production occurs during the rainy season, with only the provinces of Kandal, Kampong Cham, and Prey Veng producing nearly 60% of the 2,700 mt produced during the dry season.

3.2.7 Mung Beans

Mung bean is an important tropical pulse crop that is grown in lowlands in rotation with rice, or in uplands in rotation with corn and other grain crops. It is used in a wide range of local foods. Although there is excellent market potential for this crop in many Asian regional markets, Cambodia has yet to fully exploit these opportunities. Production has been stagnant for several years and has averaged only about 14,000 mt annually since 1996. According to the Ministry of Agriculture, production in 2001 was about 15,000 tons from nearly 25,000 hectares. Nearly 75% of total production is during the rainy season. Kampong Cham province accounts for about a quarter of total production. Banteay Meanchey, Kampong Chhnang, and Battambang provinces are also significant producers. The rest of the production is spread out across the country. Kampong Cham, Battambang, and Banteay Meanchey account for nearly all of the dry season output.

There are no confirmed reports of Cambodian mung beans being exported, but the high levels of production in Battambang and Banteay Meanchey in the northwest suggests that at least some of this crop is being shipped across the border into Thailand, where market demand is quite high.

3.2.8 Tobacco

Tobacco ranks tenth in total crop production, but this crop is an important revenue earner in certain provinces. Production in 2001 was about 7,600 mt from a total harvested area of about 9,700 hectares. Kampong Cham province produces almost 90% of the annual crop, with Kratie, Kandal, Kampong Chhnang, and Prey Veng producing only small amounts. Both domestic and foreign tobacco companies process Cambodia's tobacco crop locally.

3.2.9 Fruit and Plantation Crops

Table 8 shows total area of local fruits and permanent crops in 2001 according to Ministry of Agriculture statistics. As in many of the other Southeast Asian countries, coconut, bananas, jackfruit, longan, and mango are the dominant tree fruits grown. Most of these crops are grown throughout the country, but several key provinces dominate production. These include Kandal, Kampong Cham, Siem Reap, and Kam Pot.

Table 8. Fruit and Permanent Crops in 2001

Fruit & Per	Area (Ha.)
Coconut	31,621
Banana	30,726
Jack fruit	25,408
Logan	24,840
Mango	21,533
Cashew	15,653
Custard apple	5,670
Sapodilla	3,720
Orange	1,856
Coffee	991
Milk fruit	739
Durain	587
Pineapple	321
Guava	221
Rambutan	213
Black peper	60

Source: Cambodia's Ministry of Agriculture, Forestry and Fisheries

During some seasons of the year, even these domestically grown fruits are inadequate to meet local demand. Traders report that imported fruits include oranges, apples, longan, lychee and durian. Many of these imported fruits are brought in to supply the growing tourist trade, as well as demand in Phnom Penh.

A number of plantation agriculture projects have also been started in recent years to produce palm oil, rubber, cashew nuts, coffee, and tea. Many of these projects have been started by foreign investors, or done in partnership with well-connected Cambodians that are able to access large tracts of land. For example, one local investor with apparent political connections has recently invested in palm, cassava, and cattle production on more than 11,000 hectares.

Sources noted that some of these recent investment projects, particularly in palm and rubber, were really nothing more than schemes to remove valuable timber before the rubber and palm were planted. The ventures have also shown that Cambodia does not have the best environment for palm, with yields only at only about 5 mt per hectare, as compared to 15 mt per hectare in Malaysia.

Much of the rubber production was formerly done on state-owned plantations, but this has now shifted to state-owned or private companies. There are apparently moves to privatize these state-owned plantations.

3.2.10 Livestock

Much like the rest of Cambodia's agricultural base, the country's livestock system is still quite undeveloped and geared mainly to local commercial markets, or subsistence. However, there are signals that this sector is starting to develop, at least in certain key market areas.

Table 9 shows total estimated population of the four key livestock species in Cambodia (cows, buffalos, pigs, and poultry) for 2000. (These figures differ slightly from those shown in Table 2 due different data sources used.) Three provinces, Kompong Cham, Prey Veng,

and Takeo, dominate production of these species. Svey Rieng, Kampot, and Kompong Speu are also large production areas.

Table 9. Livestock and Poultry in 2000

	Total
Poultry	15,249,201
Cows	2,992,640
Pigs	1,933,930
Buffaloes	693,631

Source: Cambodia's Ministry of Agriculture, Forestry and Fisheries

Poultry

Poultry of course comprises the highest total number of livestock animals, but most of this production is of local breeds that are used for both meat and eggs. The local broiler and layer industry is still quite small and concentrated nearby the main urban centers, so there are few improved poultry breeds used in the commercial poultry business at this time. However, several sources noted that the layer business in particular has been expanding in recent years and that new opportunities are emerging to supply that industry. Poultry production is common in every province, but in 2000, it was most heavily concentrated in Prey Veng (2.7 million head), Pursat (1.5 million), Svay Rieng (1.5 million), Takeo (1.3 million), and Kompong Cham (1.2 million), Kampot (1.2 million), and Preah Vihar (1.1 million).

Cattle and Buffalos

Cattle and buffalo rank second in total numbers at nearly 3.7 million head and are most heavily concentrated in Kompong Cham (434,000 head in 2000), Prey Veng (412,000), Kampot (375,000), Kompong Speu (317,000), and Takeo (315,000). The beef and dairy industry is even less developed than the poultry business, with virtually all of the national bovine population being used for either draft purposes, home milk consumption, or local meat supplies. Some sources noted that beef cattle ranches had recently been developed by Cambodian and foreign investors. However, these investments were set up mainly to provide 4 to 8 weeks of finish feeding to local unimproved livestock breeds and then supply the low-end beef market in Malaysia and other countries. The sources also reported that these investments were not going very well due to a wide range of problems. There is great potential and a huge need for dairy development, but several local experts noted that this business would be difficult under current conditions due to diseases, inadequate feed supplies, and other problems noted above that plague most capital investments.

Pigs

Pork is favored meat throughout the country and pigs are produced in every province. Despite the widespread demand, pig production is still relatively small, but this sector appears to be in the early stages of taking off into a more intensive commercial business, particularly near larger urban centers where purchasing power is expanding. According to Ministry of Agriculture statistics, production is most heavily concentrated in four key provinces near Phnom Penh, including Svay Rieng (210,000 head in 2000), Takeo (208,000), Kompong Cham (206,000 head), and Prey Veng (141,000). There is also significant production of pigs in provinces with larger urban centers.

3.2.11 Feed Milling and Livestock Production Inputs

Much of the increased poultry and swine concentration around Phnom Penh is surely due to Thailand's CP Group and their recent investments in CP Feedmill Cambodia. This is a significant agribusiness investment project for the country and is located just outside Phnom Penh. It includes a large feedmill producing feed for fish, pigs, poultry, as well as shrimp. The mill's production capacity is 60,000 mt per year. Current production is only about 20,000 mt per year, but this is projected to expand to 40,000 mt in 2003.

The operation aims to develop and integrate the local feed ingredient and livestock industry by offering CP's hybrid corn seed, livestock breeding stock, animal health supplies, and other production inputs direct to producers, or via local dealers. CP has also undertaken a large extension program aimed at supporting livestock production by local small and medium scale pig and poultry farmers. Company staff, comprised of both Thais and locally-trained Cambodians, are concentrating heavily on the local swine industry and providing higher quality feed supplies, genetics, and other inputs for this segment. Many of these farms have only 20 or 30 sows. CP also expects to supply about 13,000 piglets and 2,000 gilts to local contract producers around Phnom Penh and nearby provinces in 2002. Total gilt sales are projected to expand to 5,000 in 2003. In mid-2002, CP had about 600 grandparent stock gilts on their own local production and contract farms. These farms are also used for training and extension. Based on this growing supply of local improved stock, the company expects to sell 200,000 piglets within two years. The company also has some contracting operations underway for poultry and is looking to develop shrimp production opportunities at Koh Kong and other coastal areas.

There are virtually no other local feed millers besides CP Group. According to some sources, a few small millers did exist before CP's arrival, but these firms were unable to compete and were soon forced to shut down. There is also some animal feed from Thailand, totaling about 400 mt per month, that is being smuggled into Cambodia to compete with CP's local production. Provincial or local dealers in eastern Thailand who work with local dealers in Cambodia are reportedly arranging this. Most of this product is coming into the country via Battambang and Siem Reap. Overall, however, there is still very little competition in the feedmilling industry and the market needs to grow more before it can support further investments.

Feed milling Ingredients

The bulk of CP Cambodia's rations are comprised of about 45-50% corn, much of this is repurchased from farmers and dealers to whom CP supplies hybrid corn seed. Corn seed sales have grown from only 14 mt in 1998 to 200 mt in 2002. Most of the corn is grown in Battambang and Banteay Meanchay provinces near the Thai border in northwestern Cambodia and then trucked to Phnom Penh. CP officials estimate that total corn volume produced in the country for 2002 was about 250,000 mt, which is significantly above the 185,000 mt reported by the Ministry of Agriculture for 2001. As noted above, much of this corn is marketed in Thailand rather than consumed in Cambodia. Another 20,000 mt of corn is produced along the Cambodia-Vietnam border, but most of this moves to Vietnam feed mills. CP Feedmill Cambodia uses a strong pricing strategy to source their grain requirement, but inadequate drying and storage at the farmer and local dealer level limits the quality and quantity that can be purchased.

Soybean meal and fishmeal are also important ingredients in commercial livestock feed. Although many farmers in central Cambodia are shifting production to soybean, most of this local whole bean production appears to be used for small-scale local market applications, or

unofficially exported. There is no local crusher to process the beans into meal. Thus, only small volumes of whole beans are currently being used by the local feed industry. There is some local production of fishmeal in Kompong Som province on the coast, this meal is only about 55% protein and quality is inconsistent.

Due to quality and supply constraints for local protein meals, CP imports soybean meal and fishmeal from Vietnam. Their buyers report that trucking time to their plant in Phnom Penh from loading points in Vietnam is only about six hours, as compared to two days transit time from Thailand. They project that in perhaps two or three years when the volume of soybean and fishmeal demand grows large enough, CP can then justify direct bulk shipments into Cambodia ports. Currently, however, it is more convenient and less expensive to source these protein meals from Vietnam.

High transportation costs are a critical constraint to Cambodia's feedmilling and livestock industry. Traders report that the cost of trucking corn from northwest Cambodia (Battambang area) to Phnom Penh is about 700 baht per mt (\$16.28 per mt at 43 baht per 1 US dollar). This is at least 2 or 3 times the cost to move corn the same distance in Thailand, and roughly equivalent to the per ton cost of shipping bulk grain from the U.S. to many Asian ports. Much of this high cost is due to the two days transit time involved in shipping from Thailand or the northwestern provinces. Traders report that the biggest problem is that truck drivers don't want to drive at night on the road from the Thai border to Phnom Penh due to bandits and often-poor road conditions.

The still-immature local dealer and production input distribution system is also limiting the livestock sector and related industries. Several sources noted that the dealer network is much smaller and less developed than in Thailand. Sales to dealers are generally on a cash-only basis and high levels of marketing and extension support are needed to train both dealers and farmers.

Heavy disease pressure also limits livestock production in Cambodia. The World Bank has reportedly been providing funding to some government animal health labs. The EU is planning significant support to the livestock sector through its aid program starting in 2003.

3.2.12 Fisheries and Aquaculture

Fisheries are an important primary food resource for Cambodia, providing about 70% of animal protein intake. Table 8 gives an overview of the country's fisheries and aquaculture industry for 1999-2000. These figures from the Ministry of Agriculture show that catches from inland fisheries, in combination with aquaculture, accounted for over 100,000 mt of total fisheries production. Marine fisheries are also an important resource, with 36,000 mt reported for the year.

As with rice, the fisheries industry is generally small-scale and not well developed, mainly due to inadequate infrastructure and lack of capital. There are also many limitations associated with marketing and distribution of fishery products, as discussed further below.

The country's abundant capacity in inland fisheries is directly related to Ton Le Sap Lake, the Ton Le Sap River, and the Mekong River. Traditionally, seasonal changes between these vast water resources have assured an abundant supply of fish, but those resources are now threatened. Greater demands on the Mekong by other countries are the primary threat, but pollution from agriculture, forest logging, and greater population are also serious factors.

Cambodia's marine fisheries and processed seafood sector is very much under-exploited at this stage, but this is likely to change quickly as the free trade zone at Koh Kong in the south

becomes operational in 2004. Along with this will come a new road link to Thailand, plus other infrastructure and investment that will support the development of the industry. Indeed, there are reports of many Thai and other investors who are already positioning themselves to capitalize on the growth of fisheries and aquaculture in this area.

Reports on the industry suggest that about 25% of the total fish catch is exported, with around half of that shipped through illegal channels. About 75% of fishery exports are reportedly delivered to Thailand as fresh fish and seafood. There is a tax of 10% on all fishery exports; so much of the trade is unofficial and sold at very low prices. Some of this trade with Thailand is done between fishing vessels at sea, but a large share is fresh water fish that is sold or smuggled across land borders.

Heavy government involvement in almost every aspect of the market is considered by many to be the major limitation to the industry's development. A state-owned company, Kampuchea Fish Import and Export Company (KAMFIMEX), has the sole authority to control fish exports, but its primary activity is to provide and monitor fee-based licenses to five traders who purchase fish locally and transport it across the border to Thailand's Arranyaphatet fish market. Cambodian trucks are not allowed into Thailand; so all of the product must be off-loaded, re-iced, and then sent across the border in pushcarts. The reported price for these exports is about 35 cents per kilo, about 20% of the market price in Phnom Penh. There is also a reported "fee" to KAMFIMEX of \$1.00 per kilo, plus other unofficial fees at the border.

Establishing a competitive and more market-based fisheries sector in Cambodia will almost certainly require a fundamental change in the current marketing and distribution system. More controls on fisheries management are also needed to control over-fishing. Most of all, a long-term strategic plan is needed for this fundamental sector of Cambodia's economy.

3.2.13 Forestry and Forest Products

Cambodia's forests are some of the country's most abundant resources. However, over the past 10-15 years, these resources have been exploited heavily, usually with little or no control. In recent years, mainly due to pressure from international donor agencies and NGO's, the Cambodian government has enacted legislation to better manage and control this sector. It remains to be seen whether or not these regulations have a positive long-term effect in sustaining forest resources.

There are few reliable government statistics available on the forestry or forest products industry, mainly due to the high levels of illegal logging and trade that takes place along the borders with Thailand and Vietnam. Ministry of Agriculture data shows that there were 11 companies officially registered to exploit forest concessions in 2000. The combined total of planned exploitation was about 270,000 cubic meters. Of this, only about 78,000 cubic meters had been implemented in 2000. Of this amount, over 74,000 cubic meters was listed as exported. Most of these exports were in the form of veneer, as well as some plywood.

Local sawn wood usage for 2000 was stated at about 14,800 mt. Eight companies, all of them included in the list of forest concessionaires, were listed as suppliers of these local supplies. The biggest of these, by far, was COLEXIM with nearly 10,400 cubic meters, or about 70% of the total.

3.3 Agricultural Production Inputs

Due to the many years of economic decline under the Khmer Rouge and the remaining high levels of poverty throughout rural areas, there is enormous need for many types of

equipment, such as water pumps and other irrigation equipment; tractors and tilling equipment; rice milling, drying, and packaging equipment. More and better fertilizers, insecticides, seed, and other inputs are also needed. More effective financial credit systems are also badly needed.

Transforming these needs into effective market demand and a more viable agricultural system is a much more difficult problem, however. Low spending power, poor transport infrastructure, high energy costs, weak information systems, lingering distrust, particularly among buyers and sellers, "less than 0" trust toward the government, and limited business development skills are all key factors limiting the development of the input supply system.

Despite these limitations, there several positive developments taking place. First, NGOs and private agribusiness supply shops centered in major cities and towns are already supplying many of the most important inputs. This network is gradually growing into less populated areas.

Greater investment and cross-border trade (both official and unofficial) by Thais, Vietnamese, and other nationalities is also serving to develop the local dealer and supplier network. Although most of the existing dealers are far less developed than in neighboring countries, they are an important element in providing the marketing and information links between input producers and farmers. These dealers also play an important role in providing credit and local markets for produce.

Significant efforts are also being made to provide better seed to producers, which has proven to be a key step in the economic development of many other Asian countries. Section 4.2.11 above highlighted the fast growth in demand for hybrid corn seed that is taking place. In addition, the Australian-financed Agricultural Quality Improvement Project (AQIP) is working on providing better quality rice and vegetable seed, as well as extension support to farmers groups. Other work on rice is underway at the Cambodia Agricultural Research and Development Institute in cooperation with IRRI. AQIP staff report rice yield increases are doubling in areas where better seed and management practices are being established. The project distributed over 400 mt of seed in 2001 and has a target to produce 600 mt soon. An important problem in distributing better seed is the purchasing power of farmers to pay for it. For example, high quality rice seed is priced at 1300 Riels per kg, while lower quality commodity seed is only 300-400 Riels per kg. There is a draft national seed strategy, but this has not yet been endorsed or made into policy.

Almost all fertilizer is reportedly imported from Thailand or Vietnam, so there are significant opportunities for bulk imports and local blending and distribution. Here again, the problem is mainly in the distribution, which is very difficult due to the poor infrastructure. Another problem is the lack of good soil testing facilities to determine fertilizer needs.

As noted above, the availability of affordable agricultural credit is a critical limiting factor in Cambodian agriculture. Currently, less than five% of commercial bank loans are for agricultural purposes. ACLEDA Bank and the Rural Development Bank are reportedly the only financial institutions lending to agriculture in a sizable way. ACLEDA bank began in 1995 with \$150,000 as a micro-credit institution and is now a \$30 million bank. "Informal" lending is typically done at an interest rate of 4% per month with no collateral. Most banks require at least three times the loan amount for collateral, and few will lend to projects based outside the three major cities.

3.4 Agricultural and Food Processing

Cambodia's agricultural and food-processing sector is exceptionally weak, with most food commodities sold raw and unprocessed. Overall, investment in processing industries has been meager. Much of the farm produce is either consumed locally or is smuggled across the borders to Thailand or Vietnam where value is added and it is sold at much higher prices. Due to its limited ability to add value to agricultural products, Cambodia is forced to import nearly all of its consumer goods, and even key intermediate products, such as processed soybean meal and fishmeal for the livestock feed industry.

The main domestically processed products include milled rice; smoked, dried, fermented, or salted fish; and fermented and semi-processed vegetables and fruits. Most of these products are processed in small-scale businesses and sold in local markets. However, there are a few large processing firms, including the CP animal feed plant discussed above, as well as two flourmills.

Wheat imports for flour milling are estimated to total at least 35,000 mt annually. Asia Flour, the largest of the two flour mills based in Phnom Penh, controls most of the market and currently imports two shipments of 12-14,000 mt each year. The other mill uses about 40 mt per day, so total annual demand is estimated at about 10,000 mt. Asia Flour currently uses 100% Australian wheat. Shipments arrive at the mill by Mekong river barge via Vietnam. The cost of this freight is about \$20 per mt. This is quite high, but the relatively small volumes on each shipment do not justify direct imports. The market for flour is reportedly growing about 10% per year, mainly due to increased demand for baked goods from tourists and a shift to more bread and bakery products consumption in urban areas.

With the exception of a few beverage bottlers, such as Angkor Brewery (Angkor beer and Pepsi Cola) and Cambodia Brewery (Tiger beer), there are no glass or tin canning factories in the country. This severely limits the development of other smaller canners and bottlers.

Nestle recently mothballed a dairy products processing facility in Phnom Penh, reportedly because it could not compete with the high volumes of imported (usually smuggled) dairy products. Sources say that it was difficult for Nestle to compete, even against its own products that were coming into Cambodia from Thailand and Vietnam. This situation is a good indicator of the myriad of difficulties facing food processors in Cambodia.

Overall, poor infrastructure, a lack of adequate social and institutional systems, and limited incomes and access to credit are the main constraints to further development of the agricultural and food processing industry. Cooperatives, trade associations, and other key elements of the supply chain are also not well developed in Cambodia, but the government is supporting activities to rebuild them.

3.5 Investment in Food and Agriculture

With the exception of a few notable examples discussed in the previous section, investment in Cambodia's agricultural and food processing sector has been extremely small in comparison to other ASEAN countries.

A total of 79 projects were approved, covering agriculture (24 projects), agro-industry (25), cattle (2), and plantations (28). No breakdown or total investment value is provided from August 1, 1994 through January 1, 2001.

Persons interviewed for this assessment say that many of the 79 projects were never implemented, mainly due to political, social, and economic uncertainty prior to 1999. Other projects that did get implemented were eventually stopped. The fact that only 17 of the 79

projects were initiated in 1999 or later is an indicator of the lingering uncertainty in Cambodia. Only 6 of the 17 recent projects involve agro-processing and 11 are targeted toward basic agriculture or plantations. This is another indication that investors are still reluctant to risk the relatively larger investments required in plant and equipment for agricultural and food processing.

3.6 Commercial Food Distribution and Consumption

3.6.1 Distribution System

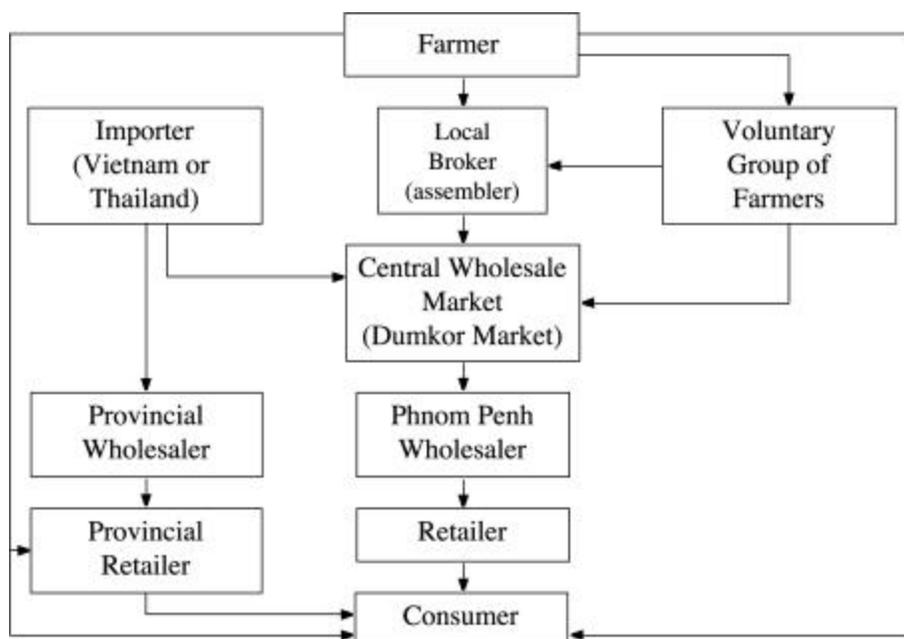
Even though Cambodia's food and agricultural system is still quite under-developed, the commercial distribution system is rather complex. This is mainly due to the surprisingly wide range of domestic and imported products being traded, as well as the many market channels in which these products are moving. This complexity is compounded by the fact that so many products are traded illegally via coastal ports and along the land borders, particularly with Thailand and Vietnam.

Mass Market Distribution

Chart 7 provides an overall picture of the movement of most domestic food and agricultural products, as well as some imported products, for the main consumer market. Further details are provided below about the import and distribution system for imported higher value food products.

For the mass market, there are essentially three widely used distribution channels. Wholesalers import products and then sell the goods to retailers. In some cases, the wholesalers provide delivery service, credit, and other support to small shops or stands in the local markets. Some sellers reach consumers through their own retail shops or via vans traveling throughout the country. Other sellers who have no retail shops sell directly to customers by advertising in newspapers, and on radio and television.

Chart 7. Distribution System for Mass Market Food and Agricultural Products



Traditional Markets

Traditional wet and dry markets still play a dominant role in the distribution of most food products that Cambodians use on a daily basis. Consumers in Phnom Penh support at least five large markets of this type, as well as dozens of other smaller neighborhood markets. Virtually every other city and town throughout the country has a similar traditional market system. It is estimated that at least 80 to 90% of the food products traded in the country are moving through this system.

Supermarkets, Grocery, and Convenience Stores

The supermarket, grocery, and convenience store trade is quickly being developed in Phnom Penh and other major cities to provide a wide range of mainly imported products to middle and higher income urban consumers. This segment of the market includes mainly expatriates and medium/upper class Cambodian consumers, estimated to number well under 500,000 people nationwide. Some of the leading supermarket groups in Phnom Penh say that their total customer base is around 10,000, so the market is still rather small in relation to the total population.

Despite the limited market base, this retail trade is diverse and growing rather quickly. In Phnom Penh alone, there are more than 25 different stores, and more are opening every year. The most popular of these are the Bayon Market group and the Lucky Market Group. The U.S. oil company, Caltex, also operates at least six convenience store outlets at its retail gas stations around Phnom Penh. Similar outlets are opening in other cities.

Most of these retailers arrange their own imports for many of the products they deal in, but some of the smaller stores also source products from importer/distributors. Many U.S. brands are carried in these stores, including Sunmaid and Ligo raisins, Ocean Spray, Del Monte, Log Cabin, Hersheys, Post and Kellogg cereals, Best Foods, etc.

Lucky Market Group is probably the leading supermarket group in the country and is an interesting example of how the modern retail trade is being developed in Cambodia. A Cambodian family, now with U.S. citizenship, which returned to the country in 1993, manages the group. They currently have two supermarkets in Phnom Penh. Other businesses in the group include a bakery, a hamburger restaurant chain with six outlets, a department store, and a purchasing center/warehouse. The company also wholesales some products to hotels and restaurants, but companies specializing in importation and distribution do most of that business. The group currently imports several containers of food products each month, including flour, French fries, meat, and a wide range of high-value packaged food products. They purchase many of these products directly from various U.S. food processors, and also work with a consolidator on the U.S. west coast who supplies many of the high value packaged products.

Even though many U.S. products are present in the market, most imports sold in the retail food market are from Thailand or Vietnam because they are cheaper and more suited to local consumer preferences. U.S. brands often command a premium due to their higher perceived quality, but U.S. products also are counterfeited more often than regional imports.

Hotels and Restaurants

The Cambodian tourism industry is considered to be one of the most promising sectors of the economy, with great potential to generate both foreign exchange and income. Trade contacts and media report that business is booming. Hotels, restaurants, and other food outlets are going up by the day in Siem Reap as the tourism industry around Angkor Wat races to meet growing demand. The Ministry of Tourism reported that tourist arrivals in 2000 increased

26% over 1999. Actual arrivals in 2001 ended 16% higher than in 2000, despite the impact of September 11. The number of inbound tourists is currently projected to increase to 600,000 in 2003. With Thailand's tourist arrivals now at about 10 million per year, Cambodia's tourism trade should continue to grow, particularly as the regional travel industry becomes more integrated.

This development is creating a prime, fast-growing market for many imported food products used by hotels and restaurants. Some sources estimate that about 75% of each tourist dollar is currently returned to Thailand or Vietnam to import fresh vegetables, fruit, meat, processed foods, flowers, and other products required by hotels and restaurants serving the tourist trade. About 90% of the tourists go directly to visit Angkor Wat in Siem Reap, so most of this trade is concentrated in that city. Tourists also often visit Phnom Penh, so the combination of expatriate and tourist trade creates significant hotel and restaurant demand there as well. There are efforts to expand Cambodia's tourism sector to other regions and sites, but it will be some time before any significant change occurs.

In Siem Reap, there are presently seven upscale and luxury class hotels, plus another two under construction. There are 25 to 30 mid-range hotels, with another 20 currently under construction. At least 40 to 50 guesthouses (many still under construction or expanding) and at least 50 restaurants also serve foreigners visiting Siem Reap. The area is estimated to have only half of the guest rooms needed to serve the 600,000 tourists expected to visit Angkor in 2003. Visitors in 2002 are expected to total 480,000, with only 3,000 rooms of all types available. Officials project that at least 3,000 new hotel rooms will need to be added to meet the growing demand, but the current rate of rooms being added is only 600 per year.

In Phnom Penh, the tourism boom is not as strong, but there is some spillover. Seven hotels and service apartments can be considered upscale and deluxe class. Mid-range hotels and guesthouses number about 25 and 20, respectively. At least 70 restaurants also serve the expatriate and tourist trade in Phnom Penh.

All of these businesses use imported products, but the primary market for higher value imported foods and other products is among the 14 or more upscale and luxury class hotels, as well as the more exclusive restaurants.

About five or six importers-distributors supply this market, either on a direct sale or consignment basis. Most of these importers are bringing the products into Phnom Penh via road from Aranyaprathet-Poipet and Battambang. Goods are sometimes distributed directly to Siem Reap, but are usually sent there from Phnom Penh. When the new free trade zone facilities open at Koh Kong near Thailand's Trat province, there will likely be a shift of products coming to Phnom Penh from that direction. This development is also expected to open up the market for both smuggled and legal goods, so competition in the hotel and restaurant supply business is likely to become even more intense. Some imported products, particularly U.S. brands, are entering Cambodia via sea freight from Singapore and Malaysia.

A survey of hotel purchasing managers and the importers-distributors suggests that the trade is highly competitive and often difficult due to problems with transportation, infrastructure, and Customs and Health officials. Buyers in Siem Reap are supplied the same products as Phnom Penh, but the competition tends to be more intense in Siem Reap due the easier access to this market by importers and distributors based in Thailand. Similarly, some distributors in southern Vietnam are also supplying the Phnom Penh market. Generally, higher quality finished goods are imported from Thailand, while raw materials and less valuable goods come from Vietnam.

Importers and hotel purchasing managers report that most of the cheese sold in this trade is from France, the Netherlands, and Australia. Butter and other dairy products are usually sourced from New Zealand and Australia. Thai dairy products are usually not competitive in this market, but hydroponic and conventional vegetables from both Thailand and Vietnam are popular and of high quality. Thai beer is also very competitive. Fish is usually bought from local sources, although some of the hotels say there is good demand for imported salmon and other seafood from Norway.

Hotel buyers noted that good hygiene and top quality are the most important factors in their meat buying decisions. For vegetables, the most important factors are standard size, color, and taste. Price is usually the key factor influencing purchases of fish and seafood. The buyers report that most tourists prefer European-style and brands of dairy products, particularly from France, but price considerations usually force them to buy from Australia and New Zealand.

There are good opportunities for U.S. food and agricultural products to capture a greater share of this market. For example, U.S. beef is highly regarded, but it is not widely marketed due to strong competition from Australian beef and lamb. U.S. French fries and potato products are also in demand, but not widely distributed. These products deserve higher levels of marketing and promotions in order to compete with similar products from Australia and other origins. Similar opportunities exist for U.S. wines. There is not a well-organized hotel and restaurant trade association in Cambodia yet; so increased promotional efforts will need to be done directly with the individual businesses.

The survey of this market also revealed that hotels would like to have more seminars and training sessions to educate local staff about various products and how to use them. With the hotel trade growing so quickly, many of these local staff have only limited experience, so promotional events tied with educational seminars may be well accepted.

3.6.2 Consumer Profile

With annual per capita GDP at only about \$266, the purchasing power of the vast majority of Cambodians is still very low. Informal estimates of annual per capita GDP in terms of purchasing power in the United States is equivalent to around \$1,500. Thus, the vast majority of Cambodia's 12 million consumers exist on a traditional diet based on rice, sometimes supplemented by fish, vegetables, and some meat. Basic appliances, such as refrigerators and microwaves, which are taken for granted in most other countries, still are out of reach for most Cambodians, mainly because there is still no electricity in vast areas of the countryside. Thus, it will be many years before most Cambodian consumers have the purchasing power to afford high volumes of imported products.

Despite this low purchasing power and population base, there is healthy and growing demand for higher value imported food products in Cambodia. Tourists, who are expected to number about 600,000 in 2002 and a similar number consume the biggest volume of these products in 2003. Expatriates living in the country, as well as middle and upper income consumers serve as an important and growing base of demand. These consumers are concentrated in the major cities and their number is estimated at not more than 500,000 nationwide.

Interviews with hotel, restaurant, and supermarket purchasing managers reveal that these tourists and higher end consumers have generally the same basic preferences, in terms of diet, taste, products, brands, seasonality, etc, as their counterparts in Thailand, and to some extent, Vietnam. These consumers do not tend to be leaders in demanding or creating new preferences, but instead usually react to changes in the market environment as products, the

overall economy, prices, market access, and other factors dictate. Much of this situation is due to the high levels of cross border trade, both legal and illegal, between Cambodia and its neighbors, particularly with Thailand.

Higher end Cambodian and foreign consumers have shown their preference for high value, good quality, and reasonably priced Western consumer goods. As noted above, many U.S. products are now available in supermarkets, convenience stores, and other retail outlets that are emerging. Several of these U.S. brands are produced in the region by Asian subsidiaries of U.S. companies, but a surprising number of products is being imported directly from the U.S., or via Singapore, Malaysia, Thailand, or other third countries. Direct imports to Cambodia will surely rise in tandem with growth in market demand, particularly as the spending power of local consumers increases.

There is also an increasing preference for Western-style fast food restaurants in Phnom Penh and Siem Reap. These businesses currently are copying fast food brands popular in other countries, mainly for hamburgers, sandwiches, and chicken. The number of outlets is still low, but the stores are popular, particularly among young Cambodians, as well as foreigners.

3.7 Food Aid

Due to Cambodia's high numbers of impoverished people, poor rural infrastructure, and flooding that occurs annually in many areas, there is still a significant need for food aid. Poor nutrition is a "silent emergency", with over 50% of the population having symptoms of stunted growth due to poor nutrition.

The UN World Food Program is the largest organization involved in meeting these food aid needs, and is by far the largest recipient and distributor of U.S. food aid in the country. In addition to WFP, at least 55 NGO's and other organizations are operating throughout the country on various small-scale food and nutrition support programs. These organizations range from large multi-national programs, such as CARE and World Vision, to small local NGO's that operate only in certain areas. Several of these organizations act as distributors for WFP food aid. However, most concentrate their efforts on support to local food and livestock production, nutrition education and training, and other village-based programs.

3.7.1 World Food Program

During the 1980's and 90's when Cambodia was plagued with many more political and economic problems than it has today, WFP was distributing up to 100,000 mt of food aid annually. Current distribution is about 50,000 mt per year. During 2001, WFP dispersed a total of 51,600 mt of commodities (mainly rice, corn-soy blend (CSB), sugar, and vegetable oils) worth approximately \$27 million to over 1.7 million people. Of this amount, about 13,000 mt was rice that was procured locally. The volume of aid was up about 30% over the year before due to the heavy need for aid following severe flooding in many areas of the country during 2000. The U.S. supplied nearly 47% of WFP's products in 2001. Other leading donors were Japan (34%) and the Netherlands (6%).

In 2002, the U.S. donated to WFP Cambodia another 26,700 mt of food aid valued at \$17.5 million. Other key donations included Japan's contribution of 20,000 mt of rice valued at \$7.6 million and 2,500 mt of food aid from Australia valued at \$1.2 million.

WFP Cambodia officials say that they are trying to wean the people and the government from food aid. They are targeting only areas where needs are greatest, and eventually plan to close down their program in the country. WFP officials also stated that certain branches of the Cambodian government are trying to force more imports to commercial use in order to

generate more Customs revenue and other income. This is quite a different situation from Laos, where the government is often unwilling to even admit that they have a need for food aid. However, international donors don't want WFP to leave Cambodia until at least 2005, mainly because of the large need that still exists, but also because many bilateral aid programs and budgets are set up on multi-year cycles.

WFP distributes food aid through three main programs:

1. Protracted Relief and Recovery Operations, which provides support to food insecure rural people through food-for-work programs, as well as to various social institutions, such as orphanages, schools, and health centers.
2. Development Assistance, which provides supplemental feeding to expecting and nursing mothers, as well as children under age five.
3. Emergency Feeding in hard hit flood areas.

WFP Food Aid Distribution is as follows: FFW (71%), social sector (16%), emergency (10%) and MCH (3%). WFP monitors food production and reserves, particularly for rice, across the country. Floods are a big and growing problem, mainly due to deforestation and changing weather patterns.

Currently, about 350 of Cambodia's 1,620 communes are considered impoverished. (Administration in Cambodia is organized by province, district, commune, and village. There are 13,000 villages, 1,620 communes and 181 districts nationwide.) Programs are oriented to work with local rural development efforts, mainly to address the 2-3 months of hunger gap each year (July-September). These programs are also targeted at minimizing land sales, prostitution, child trafficking, and other social problems. Increasingly, WFP is targeting more food-for-work programs, especially on provincial and rural roads. Some of these efforts are in conjunction with Asian Development Bank funding.

WFP has eight field offices, three sub-offices, and one main office in Phnom Penh. Its warehouse capacity totals 30,000 mt of bagged grain equivalent. About 200-250 trucks are used for distribution. All of these are now privately contracted. In addition to its local staff, 80 Ministry of Rural Development staff also work with WFP on various food aid efforts. The Ministry of Foreign Affairs is the primary Cambodian government agency that WFP coordinates with, but the ministries of Agriculture, Health, Education, and others are also important in program coordination.

Rice is the most desired commodity by recipients of food aid. Introduction of corn-soy blend (CSB) several years ago required a lot of nutritional education and other support, but WFP says that people now like this product and ask for it. However, these and other blended or more perishable products require more care in storage, packaging, and handling. For example, CSB is repacked after arrival from 25 kg bags to 3 kg bags for distribution. Oil, salt, and sugar are also repacked in a similar manner. WFP must do most of this repacking operation itself because the local packaging industry is not well developed.

WFP is interested to work with USDA and other organizations to develop new programs, particularly school feeding and other activities that complement their existing programs. One of the senior local officials stated that, "If USDA or the U.S. government would guarantee the food donation is available on a bilateral basis, then WFP would tailor-make a project." It is important that the planning process be synchronized with WFP's annual demand projections, which are usually set in October for the following year.

3.7.2 USDA Food Aid Programs

In addition to U.S. government support to WFP, USDA Washington recently provided food aid commodities to support two unique programs in Cambodia.

Salesian Missions

The first of these was in May 2002 when 2,860 tons of agricultural commodities valued at \$1.4 million were donated to Salesian Missions for use in Cambodia under the Food for Progress program. Salesian Missions is a private voluntary organization that will use the commodities for direct feeding and local sales in Cambodia. The agreement provides for approximately 1,720 metric tons of soybean oil, 230 tons soybeans and 910 tons of rice. Salesian Missions will arrange for its counterpart local organization, the Don Bosco Foundation of Cambodia, to distribute 910 tons of rice, 230 tons of soybeans and 120 tons of soybean oil over the course of one school year to 40 rural elementary schools in the Poipet area. Approximately 22,000 students will receive a lunch ration, which will provide 45% of their daily requirements. Salesian Missions will also sell 1,600 tons of soybean oil to fund activities to increase the sustainability and quality of education and health in the school environment.

HOPE Worldwide

The second program was announced August 26, 2002, and provides for the donation of 5,000 metric tons of U.S. nonfat dry milk valued at \$5 million to HOPE Worldwide, Ltd., for use in Cambodia under the Section 416(b) program. HOPE is a private voluntary organization that will monetize the milk in Thailand and use the proceeds to support the Sihanouk Hospital Center, a charitable hospital in Phnom Penh. The proceeds will support training and health care services. Training will be provided to 100 medical and hospital professionals in modern treatment techniques. Proceeds will also fund health care services for over 100,000 emergency and outpatient treatments, 425 land mine and war victims, and 75,000 HIV/AIDS patients.

Monetization of the commodities donated for these projects was still ongoing at the time of this report, but both projects are expected to have a three-year duration. Although it is too early to judge the success of these efforts, these projects are excellent examples of creating new programs and uses for U.S. food aid that closely fits local needs. USDA Bangkok could do much more to expand these kinds of efforts that create jobs and reduce poverty. Future projects should also target development of private sector food and agribusinesses and building long-term commercial market demand, both for domestic and imported products.

3.7.3 Monetization

In order to expand the scope of food aid and other development programs in Cambodia, particularly in a way that will reduce poverty and create jobs in private sector food and agribusiness organizations, there is a greater need for cash funding than for physical commodities. Monetization, or selling, of donated commodities is a commonly accepted means of generating these cash needs. However, the relatively small size of the Cambodia's local market, or the desire to not disrupt domestic or regional markets, often makes monetization a rather tricky process in practice.

The two USDA programs cited above both involve monetization of U.S. commodities. However, the nonfat dry milk powder program by HOPE International, which involves selling

the commodity in Thailand, has reportedly generated complaints from Australia and New Zealand because companies in both of these countries are leading commercial milk powder suppliers to the Thai market. As a result, there are already signs that future USDA programs for Cambodia may not allow the monetization of nonfat dry milk in Thailand.

Domestic monetization also has its problems. Officers at one NGO interviewed for this assessment said that they had recently tried to monetize wheat flour donated from Canada. Their surveys indicated that wheat flour had high acceptability and demand was strong, particularly in urban areas. However, when the NGO attempted to sell the flour, local millers and distributors colluded to limit the bid prices to only about 75% of the normal market level. The NGO then switched to canola oil, which was sold in Vietnam at about 97% of its market value.

These examples show that commodities selected for monetization must be carefully selected based on detailed studies of local and regional market conditions, in combination with the demands of specific projects the monetization is supporting. Based on this general assessment, vegetable oils, wheat flour, and milk powder still appear to be acceptable products for monetization, either directly in Cambodia on a relatively small scale, or in third countries in bigger volumes.

Soybean meal also appears to have potential for monetization. Demand within Cambodia is probably not more than 20,000 mt annually (based on CP Cambodia's projected 2003 feed output of 40,000 mt x 50% ration inclusion), and there may be logistical problems with this. However, there may be opportunities for third country monetization in Thailand, the Philippines, and Indonesia, where demand currently exceeds 3 million tons annually. Much of this demand is filled by the U.S., so there is less risk of disrupting markets for third country suppliers. Similar third country monetization opportunities may exist in these countries for whole soybeans.

Other U.S. bulk and intermediate commodities, such as rice, cotton, and pulses, may also be suitable for monetization, but the markets and other considerations must be studied more carefully.

3.8 Agricultural and Trade Policy

3.8.1 Agricultural Policy

As noted earlier, more than 80% of Cambodia's population lives in rural areas and at least 35% of its people are living in poverty. Studies have shown that the poor mainly reside in rural areas, and live in households headed by farmers, or where the head was illiterate and had few years of schooling. Therefore, policies that affect agriculture and prices, especially for rice, have wide-reaching implications for the welfare of millions of Cambodians.

The Cambodian government's priorities for agriculture and the rural sector, as described in its most recent social and economic development plan, include:

- Improving food security
- Adding value to crop and livestock production
- Increasing income opportunities for rural households
- Strengthening participatory processes
- Ensuring sustainable production, and
- Increasing the availability of rural financial services

The priorities highlight the biggest challenge facing Cambodian agriculture, which is to shift from a rice-based economy to one that is more diversified and producing higher value

products. There is already some shift in the direction of agribusiness and trade, particularly along the border areas with Thailand and Vietnam, and with certain investment projects.

Even though agriculture and rural development is so critical to so many Cambodians, specific policies on agriculture are not well defined, mainly because the Ministry of Agriculture is a relatively weak and underfunded agency. However, sources interviewed for this assessment report that ADB aims to provide \$35 million in funding for agricultural policy development and reforms, particularly regarding fisheries, marketing, privatization, agricultural research, and other areas. This will be implemented through the Agricultural Sector Development Program within the Ministry of Agriculture, but this work is not yet complete. The initial phases of this work have already begun though.

ADB is also considering providing funds for investment, especially to promote Small and Medium Size Enterprises and farmer groups that are producing higher value products. This would be targeted mainly at livestock, as well as crops other than rice. The livestock support targets mainly cattle, hogs, and poultry, and possibly cattle for export.

Recently, a Department of Agro-Business was created within the Ministry of Agriculture. A relatively small department, with a director and less than five staff, and specific activities of the department are still unclear. Apparently, the intent is to set up offices at the provincial level to develop and promote agribusiness systems.

Other bilateral programs aim to support development of agricultural policies and programs. The EU aid program is reportedly considering giving greater support to the livestock sector as part of its new 68 million Euro aid program that was recently announced. This will be over three years and 30 million Euros will be targeted at rural development. The EU's "Everything But Arms" trade policy, which was enacted in March 2002 and covers 47 countries, also allows Cambodian exports to enter the EU tax-free.

3.8.2 Agricultural Trade Policy and Market Access

Trade Policy

As noted in section 3.4 above, the Cambodian government has an extensive program underway to integrate trade as a key element of its national poverty reduction and technical assistance policies. The Ministry of Commerce is spearheading this "Integrated Framework" approach, with support from both multi-lateral and bilateral aid programs. The policy is to be implemented throughout all government agencies, including the Ministry of Agriculture. The approach is intended to develop WTO-consistent policies and legislation and to ensure that further government reforms are in line with WTO regulations. Agriculture and agro-processing, fisheries, tourism, handicrafts, and labor services are the six key sectors that are targeted in these new policy efforts.

The German Technical Cooperation agency (GTZ) is also supporting agricultural trade policy development. Its objective is to elaborate a national foreign trade strategy for selected countries. Projects include the promotion of bio-pesticides and agricultural quality improvement. The Japan aid agency, JICA, is providing support for human resource development by trying identifying and forming industries with comparative advantage.

UN ESCAP has also undertaken valuable support in trade facilitation at the regional level. The Australian government also recently announced a \$3.5 million sanitary and phytosanitary capacity building program for ASEAN countries. This is intended to build the capacities of regional countries to manage animal and plant pests and diseases within their own borders, and to operate effective quarantine services at their own borders.

Tariffs

Cambodia's agricultural tariffs are relatively low. The entire tariff structure was most recently reformed in 2001. High rates were reduced from 120 per cent to 35 per cent and the system was simplified with the number of tariff bands reduced from 12 down to 4. At the same time, excise taxes were raised on certain products to maintain revenues. Tariffs now range from 0 to 35%, as follows:

Luxury goods and finished products:	35%
Machinery and equipment:	15%
Raw materials	7%

Wine, cigarettes, and many high-valued packaged food items are considered luxury goods and are taxed at the 35% rate, while meats, fruits, tea, vegetable oil, sugar, and many other consumer goods are assessed a tariff of 7%. Rather surprisingly, wheat flour is assessed at the 35% rate. This duty protects local flour millers and causes bakers and small food processors to pay more and pass the costs on to consumers. Imports of some goods, including pork are banned.

Agricultural equipment and inputs are exempt from tariffs, but importers must pay value-added tax (VAT) of 10%.

Regulations and Other Market Access Issues

Cambodia signed an agreement in 2000 with the Societe Generale de Surveillance (SGS) to resume pre-shipment inspection under a Comprehensive Import Supervision Scheme (CISS) program. Any imported goods shipped in a container and which cost over US\$4,000 must undergo pre-shipment inspection. Only cigarettes are exempt from inspection.

The actual amount of duty paid by importers is also affected by valuation procedures. For many goods, the pre-shipment inspection company proposes a value for duty based on fair market value. In other cases, the Ministry of Economy and Finance sets minimum or fixed values for duties and other taxes in order to reduce under-invoicing and support the weak customs system. However, this system can be used to provide high protection to local businesses and it is often leads to increased corruption by government officials.

Cambodia is still in the process of developing a health and safety regulatory framework, but in May 2000, the National Assembly passed a law on quality of goods and services. This comprised food safety, consumer protection, and product liability.

Import licenses for food and agricultural products have been abolished.

Grocery store buyers report that packaged food products must have expiration dates printed on the packages. Printed product codes, which are often used in place of specific expiration dates by U.S. manufacturers, create problems for importers. If packages don't have clear expiration dates on them, then importers must get pre-shipment clearance from local officials, which is a difficult process.

Most importers say that corrupt and predatory government officials are the main scourges they have to deal with in the business. Some sources in the grocery trade said that they currently have to pay at least \$500 in extra fees for each container of product they import. These fees used to be \$200 per container, but new requirements on bar codes and expiration

dates have pushed up the cost of doing business with government officials. Similar problems exist for more basic agricultural inputs and products. The livestock department within the Ministry of Agriculture reportedly sets quotas for livestock imports, but this quota system is said to be really nothing more than a means to collect additional fees from importers.

Cambodia's Customs Department requires importers and exporters to provide a bill of lading, packing list and invoice for all shipments. Goods shipped through Vietnam via the Mekong River must also have a transit license.

Cambodia Import Export Inspection and Fraud Repression Direction (Camcontrol), a division within the Ministry of Commerce, is tasked with standards setting. This agency does not currently have a mechanism to involve industry participation in this process and there are currently no industry standards-setting organizations operating in Cambodia. After a law on product quality went into effect in May 2000, the Ministry now requires foodstuffs to have a label including the following information:

- Name of goods
- Producer name and address
- Source
- Quantity
- Batch number and production date
- Expiration date
- Ingredients
- Directions for use (if necessary)
- The license provided by any authorizing institution (if required for local products).

Camcontrol has confiscated some shipments it deemed not to be in compliance, and is involved in programs to educate consumers about hazardous products.

In February 2002, the Cambodian government passed a trademark law that complies with the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). The law outlines penalties for trademark violations and procedures for registering trademarks. Before this law was in force, owners of trademarks were unable to seek relief in court. The Ministry of Commerce took effective action in several cases since 1998, including infringements against well-known U.S. marks, including Pizza Hut, Nike, Scotties, Marlboro, and Pringles. The Ministry has also maintained an effective trademark registration system, registering more than 10,000 trademarks (over 2,900 for U.S. companies) and has been cooperative in preventing unauthorized individuals from registering U.S. trademarks in Cambodia.

Cambodia currently has no anti-monopoly or anti-trust statutes.

3.9 U.S.-Cambodia Agricultural Trade

Due to the high level of smuggling and other unofficial trade, there is little reliable data showing Cambodia's international agricultural trade. U.S. trade figures provide some insights into agricultural trade between the two countries, however.

Table 11 and Table 12 summarize U.S. exports and import trade of agricultural, fish, and forestry products with Cambodia for 1997 through August 2002. U.S. exports include a rather wide range of products, while imports from Cambodia is much smaller than U.S. exports and is dominated by rubber, value-added wood products, and various types of fish and seafood.

Table 11. U.S. Exports of Agricultural, Fish & Forestry Products to Cambodia ('000 US dollars)

Product	1997	1998	1999	2000	2001	January-August		% Change
						2001	2002	
Bulk Agricultural Total	467	150	506	3,547	5,323	888	541	(39.05)
Rice	-	-	-	2,428	4,913	705	-	(100.00)
Cotton	-	-	-	302	410	183	541	195.79
Tobacco	467	144	506	817	-	-	-	-
Other Bulk Commodities	-	5*	-	-	-	-	-	-
Intermediate Agricultural Total	385	222	589	831	2,999	960	645	(32.80)
Soybean Oil	-	-	-	-	-	-	86	-
Vegetable Oils (Excl Soybean Oil)	-	-	-	-	1,761*	42	-	(100.00)
Live Animals	349	160	73	-	-	-	-	-
Sugars, Sweeteners & Beverage bases	-	43	502*	158	216	208	423	103.69
Other Intermediate Products	36	20	13	659	1,023	711	123	(82.62)
Consumer-Oriented Agricultural Total	1,341	468	882	852	965	613	607	(0.93)
Snack Foods (Excl Nuts)	34	44	164*	74	55	52	67	29.23
Breakfast Cereals Pancake Mix	-	4	10*	18	5	5	-	(100.00)
Red Meats, Fresh/Chilled/Frozen	10	11	74*	37	19	16	11	(30.57)
Red Meats, Prepared/Preserved	7	4	11*	-	-	-	-	-
Poultry Meat	12	13	22	87	35	23	10	(55.44)
Dairy Products	-	-	3	-	186	182	-	(100.00)
Egg and Products	-	62*	-	-	-	-	-	-
Fresh Fruit	992*	221	262	440	498	258	342	32.57
Fresh Vegetables	-	-	-	-	-	-	-	-
Processed Fruit and Vegetables	152*	17	38	54	45	21	47	123.06
Tree Nuts	-	-	-	-	-	-	-	-
Wine & Beer	47	-	24	-	-	-	-	-
Pet Foods (Dog & Cat Food)	4*	-	-	-	-	-	-	-
Other Consumer-Oriented Products	83	92	275	24	6	6	17	183.85
Forest Products (Excl Pulp and Paper)	-	-	-	-	11*	-	-	-
Other Value-added Wood Products	-	-	-	-	11*	-	-	-
Fish and Seafood Products, Edible	-	-	6*	3	8*	8	-	(100.00)
Other Edible Fish and Seafood	-	-	6*	3	8*	8	-	(100.00)
Agricultural Product Total	2,193	840	1,976	5,230	9,287	2,461	1,794	(27.12)
Agricultural, Fish and Seafood	2,193	840	1,982	5,234	9,305	2,649	1,794	(27.34)

Source: U.S. Bureau of the Census Trade Data

Table 12. U.S. Imports of Agricultural, Fish & Forestry Products to Cambodia ('000 US dollars)

Product	1997	1998	1999	2000	2001	January-August		% Change
						2001	2002	
Bulk Agricultural Total	1,072	466	766	904	1,053	852	778	(8.75)
Rubber & Allied Products	1,072	466	766	904	1,053	852	778	(8.75)
Other Bulk Commodities	-	-	-	-	-	-	-	-
Intermediate Agricultural Total	-	-	-	-	-	-	14	-
Other Intermediate Products	-	-	-	-	-	-	14*	-
Consumer-Oriented Agricultural Total	-	14	14	58*	9	9	13	39.16
Snack Foods (include. chocolate)	-	-	-	17*	-	-	-	-
Fresh Vegetables	-	-	-	-	-	-	2*	-
Processed Fruit and Vegetables	-	-	-	-	9	9	8	(10.00)
Wine & Beer	-	14	14	15*	-	-	-	-
Nursery Products & Cut Flowers	-	-	-	-	-	-	2*	-
Spices	-	-	-	21*	-	-	-	-
Other Consumer-Oriented Products	-	-	-	6	-	-	-	-
Forest Products (Excl Pulp and Paper)	1	19	23	221	392*	184	60	(67.40)
Logs and Chips	-	14	-	42*	24	10	9	(16.46)
Hardwood Lumber	-	-	-	-	9	9	-	(100.00)
Panel Products (include. plywood)	-	-	-	119*	59	20	25	25.92
Other Value-added Wood Products	1	5	23	61	299*	145	27	(81.56)
Fish and Seafood Products, Edible	-	393	1,063*	892	342	293	701	139.17
Shrimp	-	-	25*	17	-	-	-	-
Other Edible Fish and Seafood	-	393	1,038*	875	342	293	701	139.17
Agricultural Product Total	1,072	481	780	962	1,062	861	804	(6.64)
Agricultural, Fish and Seafood	1,073	893	1,866	2,075	1,796	1,338	1,565	16.95

Source: U.S. Bureau of the Census Trade Data

Analysis of this data shows that bilateral agricultural trade between the two countries is very much in favor of the U.S., with a positive and strongly increasing net agricultural trade balance each year since 1999. In 2001, the U.S. sold more than five times as many agricultural products to Cambodia than were shipped to the U.S.

U.S. agricultural exports in 2001 to Cambodia totaled over \$9 million, a sharp increase from 1998 when exports were less than \$1 million. Bulk and intermediate products were the primary reason for the sharp increase in 2000 and 2001. These products included mainly rice and various vegetable oils, primarily for food aid use. In fact, if these two key food aid commodities are excluded, U.S. exports for the period would have been fairly stagnant at about \$2.5 million per year. The value of bulk, intermediate, and consumer foods exports would have been more balanced, however. Exports through August of 2002 were down 27% from the previous year and did not include rice or oils. This provides further evidence of the importance of U.S. food aid to total exports.

Table 13 shows the top 12 export commodities from the U.S. to Cambodia for 1997-2001. As noted above, rice and vegetable oils dominate this trade, mainly due to the high demand for these products for food aid uses. In the commercial market, cotton, tobacco, and other intermediate products showed the largest average value for the period. Sugars, sweeteners, and beverage bases, snack food, red meats, poultry, dairy products, and wine and beer also had fairly high and consistent values.

Table 13. Top Export Commodities from U.S. to Cambodia, 1997-2001

	1997	1998	1999	2000	2001
Rice	0	0	0	2,428	4,913
Cotton	0	0	0	302	410
Tobacco	467	144	506	817	0
Vegetable Oil	0	0	0	0	1761
Sugars, Sweeteners, & Beverage Bases	0	43	502	158	216
Other Intermediate Products	36	20	13	659	1023
Snack Foods (Excl Nuts)	52	44	164	74	55
Red Meats, Fresh/Chilled/Frozen	10	11	74	37	19
Poultry Meat	12	13	22	87	35
Dairy Products	0	0	3	0	186
Fresh Fruit	992	221	262	440	498
Wine & Beer	47	0	24	119	113
Total	2,211	840	1,982	5,234	9,305
Excluding rice and vegetable oil	2,211	840	1,982	2,806	2,631

SECTION IV. BEST PROSPECTS FOR U.S. FOOD AND AGRICULTURAL TRADE

4.1 Bulk Products

As noted in the previous section, bulk products have shown the strongest growth in U.S. exports to Cambodia in recent years. This trade has been dominated by rice for food aid programs. Given Cambodia's continuing need for food aid and the fact that the U.S. has been the largest donor of that aid, it's likely that bulk product exports, particularly rice, will remain strong. There are commercial opportunities for other bulk products as well.

4.1.1 Cotton

Cotton exports are showing excellent growth, with total value climbing from \$302 million in 2000 to over \$541 million in the first eight months of 2002. Much of this growth is in tandem with the continued strength of Cambodia's textile industry. As the country achieves WTO status, and assuming that its quotas for the U.S. market are maintained, there should be good opportunities for U.S. cotton as raw material.

Experts in this business say that, at present, only one weaving mill in Cambodia is likely to be using U.S. cotton, probably to mix with China and Pakitsan cotton to improve yarn quality. Most of the fabric used for Cambodia garments is imported directly from China and Hong Kong. There is little fabric production in Cambodia because the investment needed for spinning and weaving is just too great and there is excess capacity throughout China.

These experts also suggest that plans to support further U.S. cotton exports to Cambodia should include promoting yarn made from U.S. cotton. These promotions should be targeted at knit garment makers who are vertically integrated to do both knitting and dyeing the fabric needed for garment production. Most of these manufacturers tend to not spin their own yarn, but instead buy the yarn from a spinner.

4.1.2 Milling Wheat

Wheat imports for flour milling are estimated to total at least 35,000 mt annually. Asia Flour, the largest of the two flour mills based in Phnom Penh, controls most of the market and

currently imports two shipments of 12-14,000 mt each year. The other mill uses about 40 mt per day, so total annual demand is estimated at about 10,000 mt. This trade is currently dominated by Australian wheat that is imported into Vietnam in large bulk shipments and then sent in smaller parcels of 12-14,000 mt by Mekong river barge to Phnom Penh. Vietnam is now importing some U.S. wheat, so this bodes well for U.S. wheat to enter Cambodia.

The leading flour miller, Asia Flour, reports that the market for flour is growing about 10% per year, mainly due to increased demand for baked goods from tourists and a shift to more bread and bakery products consumption in urban areas. However, more marketing effort is needed to convince the two flour millers to shift to U.S. wheat. Much more promotion is also needed among the bakeries and other end users to highlight the advantages of U.S. wheat in Cambodian foods.

4.2 Intermediate Products

4.2.1 Vegetable Oils

Various types of vegetable oils showed strong growth in U.S. exports in 2001, with over \$1.7 million shipped that year. The majority of this was likely used in food aid programs. Although exports to date in 2002 are negligible, buyers report that the demand for oil in both the food aid and commercial markets is sure to remain strong. They point to the fact that Cambodia currently has no domestic oil crushing or refining industry, as well as rising consumption among the general population and in the hotel and restaurant trade. Some sources estimate total demand at 100,000 mt per year.

4.2.2 Soybean Meal and Other Feed Ingredients

Cambodia's feed milling industry is still small and dominated by only one key player, CP Feedmill Cambodia. The mill's production capacity is 60,000 mt per year. Total output in 2002 was 20,000 mt and is projected to double to 40,000 mt in 2003, with similar strong growth projected for 2004. Assuming 40% average inclusion of soybean meal in rations, current demand is estimated at about 16,000 mt annually. This is very small in relation to imports by Thailand and other regional countries, but still reasonable given the early stage of the Cambodian market. CP currently imports its soybean meal requirements from Vietnam, so some of its usage may already be U.S. meal. The strong growth in feed demand presents new opportunities for U.S. meal suppliers, as well as other U.S. feed ingredient exporters, to differentiate their products and support the development of Cambodia's livestock industry.

4.2.3 Swine Breeding Stock

CP Group is concentrating heavily on developing Cambodia's swine industry and providing higher quality genetics to local producers. CP currently has about 600 grandparent stock gilts on their own local production and contract farms and expects to supply at least 13,000 piglets and 2,000-bred gilts to contract producers in 2002. Gilt sales are projected to expand to 5,000 in 2003. Based on this growing supply of local improved stock, the company expects to sell 200,000 piglets within two years. Many of the business opportunities in this trade will likely need to be channeled through CP, but other sales potential is likely to emerge as the swine industry develops.

4.2.4 Sugars, Sweeteners, and Beverage Bases

These products have shown irregular but continued growth since 1997. U.S. exports for the first eight months of 2002 were \$423,000 and appear to be on track to exceed the \$502 million peak in 1999. Much of this growth is attributed to rising demand for soft drinks,

particularly Pepsi and Coke, which are bottled locally. The rising tourist trade is certainly a key driver of this rising demand.

4.2.5 Hops, Malt, and Other Beer Industry Ingredients

Suppliers of products to the two major breweries in Cambodia, Angkor Brewery and Cambodia Brewery (Tiger beer), say that demand for beer is strong and increasing 10% per year. The high volumes of smuggled products from Thailand and Vietnam, as well as U.S. trade data, support this view. Sources say that virtually 100% of the hops, malt, and other ingredients used in beer production are currently imported in container load quantities from Europe. Although details of this trade are not clear, there appear to be opportunities for U.S. suppliers to capture a share of this growing market.

4.3 Consumer-Oriented Products

Exports of U.S. consumer products to Cambodia, as a group, have not been as large as bulk and intermediate products in recent years. However, total demand has climbed steadily and official exports now total about \$1 million per year. Total imports are significantly more due to the high levels of smuggling of these products and the high values involved. Moreover, this sector represents solid commercial business, as few of these products are destined for food aid.

4.3.1 Fresh Fruits

U.S. fresh fruit exports averaged over \$450,000 in 2000 and 2001, and shipments in 2002 appear to be on track to exceed this level. Apples comprise the bulk of these exports, but the booming tourism industry and rising hotel and restaurant trade bodes well for other products as well.

4.3.2 Wine & Beer

The comments above concerning demand for beer industry ingredients allude to the fast-growing market for imported wines and beer. There are high volumes of smuggling in this trade as well, so total imports are impossible to estimate. Hotel and restaurant buyers say that most of their customers prefer European (mainly French) and Australian wines, but there is potential for U.S. wines to capture a bigger share of the market. U.S. exports of wine and beer to Cambodia have averaged over \$115,000 annually since 2000 and shipments in 2002 appear likely to exceed \$150,000. Although still small in total, there is healthy growth in this market.

4.3.3 Meats and Poultry

Total official red meat and poultry exports to Cambodia from the U.S. have totaled well under \$100,000 annually. The actual trade in products from the U.S. and other origins is significantly more due to transshipments from Thailand and smuggling. Several hotel buyers interviewed for this assessment said that they would like to use more U.S. beef if it is competitively priced with Australian beef.

4.3.4 Other Consumer Products

There is rising demand for a full range of high-value consumer food products in the supermarket and food service trade. At least five importer-distributors and two supermarket groups in Phnom Penh are importing these products directly, with at least some of them sourcing from the U.S., either directly or via Singapore and Malaysia. Cheeses, snack foods,

canned fruits and vegetables, and pet foods appear to be fast moving items in the supermarket trade. There is also rising demand for French fries and other potatoes used in the fast food business.

SECTION V. KEY CONTACTS & FURTHER INFORMATION

The USDA Foreign Agricultural Service in Bangkok, Thailand maintains up-to-date information covering food and agricultural import opportunities in Thailand and would be pleased to assist in facilitating U.S. exports and entry to the Thai market. Questions or comments regarding this report should be directed to the Foreign Agricultural Service in Bangkok at the following local or U.S. mailing address:

<p>Local: Office of Agricultural Affairs U.S. Embassy 120-122 Wireless Road Bangkok 10330 Tel. +662-205-5106 Fax. +662-255-2907 Email: Agbangkok@fas.usda.gov Home page: http://www.fas.usda.gov</p>	<p>U.S. Mail: Office of Agricultural Affairs U.S. Embassy Box 41 APO, AP 96546</p>
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End of Report.